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EDITORIAL DEPARTMENT.

WARREN B. OUTTEN, M. D., - - -
WILLIAM PORTER, M. D., - - - - } EDITORS.
R. B. H. GRADWOHL, M. D., - - -
OTHO F. BALL, M. D., - - - - - MANAGING EDITOR.

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INCREASE OF CANCER IN MASSACHUSETTS.

The recent Shattuck lecture delivered by William F. Whitney before the Massachusetts Medical Society, on "The Alleged Increase of Cancer in the State of Massachusetts," deals with the subject from a careful analytical examination of the statistics on cancer in Massachusetts during the past fifty years, together with statistical tables showing the prevalence of cancer in the New England States, in England and Wales, and in Austria. The lecturer first explained what is meant by "mortality" of a disease in one place as compared to another—*i. e.*, the number of persons who have died during a year with a certain disease out of a given number who were alive at the beginning. The total number is usually 1000. Then, again, comparison is made between the total number dying of one disease and all those dying of all other diseases: this is called the death ratio, and is expressed in per cent.

From the sum of all the figures cited and references made, it can be said that if death from cancer should go on at the apparent geometrical rate of increase of the past fifty years, in two and a quarter centuries every person over thirty years would die from that disease. This rate, however, is probably only arithmetical at its worst. The increase is probably due to better diagnosis and registration, and until the ratio of deaths over thirty years has reached eight or nine per cent., which is shown by autopsies to be the true rate for cancer, it is not justifiable to speak of the increase as inherent in the disease itself. The compiler further asserts

that a comparison of the rate for Massachusetts with other places shows it to be about the same, with greater variation between the males and females than is the case in Austria, which is remarkable for the correspondence between the two sexes.

According to the writer, there is only a statistical increase of cancer in the State of Massachusetts, and it remains for other investigators later on to demonstrate whether this is something more than a statistical increase or not. Until these figures are forthcoming, nothing absolute can be said.

CHEMISTRY OF THE BACILLUS TUBERCULOSIS.

It is well-known to all that the bacillus tuberculosis is an "acid-fast" bacterium—*i. e.*, when subjected to staining with carbol-fuchsin, for example, and then decolorized with acid solutions, it retains the red color of fuchsin. The acid-fast characteristic of the bacillus tuberculosis is responsible for its ready differentiation from other similar shaped bodies. A recent investigation into the chemistry of the tubercle bacillus is that reported to the Pathological Society of London by Drs. W. Bulloch and J. R. McLeod. The research was undertaken chiefly to ascertain to what chemical substance these bacilli owed their peculiar "acid-fast" properties. In confirmation of the work of Aronson, they found that after thoroughly extracting the bacilli with alcohol-ether, containing one per cent. hydrochloric acid, the acid-fast properties of the bacilli disappeared. The extract on cooling deposited a white scaly precipitate. This was separated and found to stain deeply with carbol-fuchsin, retaining the stain even after treatment with seventy-five per cent. sulphuric acid. The extract also contained a lipochrome, a considerable amount of fatty acid, and only a trace of neutral fat. The extracted bacilli were then treated at sixty degrees C. with between two and three per cent. caustic potash until all proteid had been removed. The residue was found to contain about three and five-tenths per cent. nitrogen, and to yield on hydrolysis a body capable of reducing cupric salts in alkaline solution. They suggested that the sediment might therefore consist, in part at least, of chitin. Chitin is a white horny substance, which is found in the other shells of insects and other crustaceous animals. Sufficient material has not yet been prepared to decide this question. Ruppel and others suggested that the acid-fast properties of the tubercle bacillus might be due to chitin, since it has been observed that the substance was very "acid-fast," and also that certain fungi contained it. Bulloch and McLeod, however, found that chitin did not retain the fuchsin stain when the usual procedure was adopted, but that by leaving the chitin in the stain for twenty-four hours it was fast, even to fifty per cent. sulphuric acid. They found also that the wax-free residue of the bacilli was acid-fast after twenty-four hours' staining.

ULCER OF THE STOMACH CAUSED BY THE DIPHTHERIA BACILLUS.

It is now well known that the Klebs-Loeffler bacillus can cause manifestations other than those found in the fauces and naso-pharynx. Diphtheritic infection of wounds is well known, as is diphtheritic vaginitis. Aside from these extra-faucial lesions, we have heard but little concerning the pranks of the diphtheria bacillus when it chances to poach upon other preserves in the human organism. Schoedel, in the *Muenchener medicinische Wochenschrift*, June 26, 1900, refers to a case of fibrinous inflammation of the gastric mucous membrane, due to the diphtheria bacillus, in the case of a child who died of faucial diphtheria without any gastric symptoms.

A most interesting case of gastric ulcer caused by the diphtheria bacillus is recorded by William R. Stokes in the *Johns Hopkins Hospital Bulletin* for July, 1901. The patient was a young man picked up on the street, suffering with well-marked faucial diphtheria. The membrane on the tonsils disappeared after the injection of antitoxin, but on the sixth day of treatment his temperature became subnormal, accompanied by gastric pain and hyperesthesia. He died on the tenth day. By autopsy the stomach showed an ulcer two and a half ccm. by one ccm. near the pylorus in the most dependent part of the greater curvature of the stomach. It was covered with a dark yellow membrane, in places almost black. Cultures showed the presence of the Klebs-Loeffler bacillus.

The case is highly interesting in view of the fact that it has been maintained by some authorities that a true diphtheritic involvement of the stomach is well-nigh impossible, on account of the fact that the gastric juice will take care of and destroy diphtheria bacilli in case they are swallowed. This case showed this view to be erroneous. It may be well for clinical observers to take heed of this circumstance, as the diphtheria bacillus may bear an important etiologic relationship to gastric ulcer.

CONCERNING THE BACILLUS ÆROGENES CAPSULATUS.

We have frequently referred to the bacillus ærogenes capsulatus in these columns in its relations to pneumatopathology. The most complete dissertation in this regard is found in William H. Welch's admirable Shattuck lecture of last year, in which he goes thoroughly into its biological and morphological characteristics and its disease-producing behavior. Before Welch's extensive work more than one case of emphysematous gangrene had been incorrectly ascribed to the workings of the bacillus of malignant edema. It seems now that the bacillus ærogenes capsulatus of Welch is the organism which will be found to be the factor in all cases of emphysematous gangrene in man.

Besides the frequency of cases which are being reported from time to time—about sixty so far—one is struck with the alarming fatality accompanying such infections. About one-half of the cases reported have ended fatally. Two more cases of emphysematous gangrene due to the bacillus

ærogenes capsulatus have been recently reported by L. M. Loeb, in *American Medicine*, July 27, 1901. In one of these cases, which ended fatally, the patient disclaimed having had a skin abrasion, the attack beginning with pain in the left shoulder and afterwards showing swelling, emphysema and pustulation of the left arm. The second case had its origin in a traumatism, in a boy of nine years. The knee was injured and developed emphysematous gangrene. Multiple incisions were made, leading to permanent injury of the joint, but the boy recovered from the general infection.

PEMPHIGUS VEGETANS (?) IN AN INFANT.

In *Pediatrics* of June 15th appears an interesting article entitled "An Eruption Resembling Pemphigus Vegetans in an Infant," wherein the writer, after stating the clinical findings in the case, excludes syphilis on the following grounds: "First, entire absence of syphilitic history and no traces of syphilis in the parents; second, the child was born with a healthy skin, and showed no eruptions whatever the first four months of life, the only symptoms of disease being indigestion and emaciation; third, at present we find no mucous patches in the mouth, no patches or fissures about the commissure of lips, and no lesions on palms and soles, and no adenopathy." The diagnosis of pemphigus vegetans is made on the strength of the pemphigoid eruption following bronchitis, and accompanied with papillary hypertrophy.

It seems that the writer has fallen into one or both of two common errors in the diagnosis of skin diseases in children: firstly, in laying great stress upon the statements of parents regarding their own previous skin diseases, since half of the poorer classes pay but little attention to such matters; and here be it remembered that a child born syphilitic may present the first symptoms months or even years after birth, as in syphilis tarda. A vesiculo-pustular eruption, often sparing palms and soles, occurring between the third and fifth months, is not uncommonly the first manifestation of syphilis, mucous patches and fissures often being absent in these attenuated cases, although they are apt to present themselves during any subsequent outbreak of the disease. Thus it would appear that the writer is not justified in excluding syphilis on the grounds given, especially since noting the results of mercurial baths, which give often most gratifying and striking results in the treatment of syphilitic children, and which, according to Baginsky's experience, is the best and quickest method of producing results.

The second error referred to is the common practice of calling every bullous eruption a pemphigus, making this very rare disease comparatively common, whereas impetigo contagiosa bullosa, very often the offender among poorly nourished infants, is classified among the rarer diseases of the skin. Close study of the course of these bullous eruptions, noting the results of exposure, and lastly proper attention to the bacteriological aspect, should soon assign these diseases to their proper places in the category of skin diseases.

A. F.

THE HOME-TREATMENT OF TUBERCULOSIS.

The reaction from climate-hunting is upon us. The favorite prescription of the fathers, "take creosote, cod-liver oil and go west," is almost a memory. The protests of unselfish and careful physicians in Colorado and California against the indiscriminate inpouring of the consumptive throng have been heard. The deductions of superintendents of sanitaria and advocates of better home treatment are being read.

Already these protests and deductions are influencing the minds of the profession, and physicians everywhere are now studying the indications in each case, and are asking: "What more can I do, not only to prolong life, but to save it?"

The thoughtful essays from Babcock, Bartlett, Elliot and many others during the past year, advocating open-air life, so far as is possible, with home treatment, in which rest, good food, hydrotherapy and the greatest comfort can be assured, have set men to thinking that perhaps there may be something better than routine medication and—shall we say it? indifference if not neglect.

The same kind and practical thought that has stamped out small-pox, robbed diphtheria of its terrors, and limited the bubonic plague, will find a better way of controlling "the great white plague" in the community and in the individual than by dispersing its victims over the length and breadth of the land.

Less rapid than diphtheria, less innocuous than small-pox, but more wide-spread than either, its control and limitation is the question of the hour.

THE MEDICAL DIRECTOR OF THE FAIR.

The daily papers have been constantly keeping before the public the importance and the possibilities of the appointment of the Director-General of the Fair. Very little has been said regarding the selection of the Medical Director. A few candidates have been "looking after their fences," while the most of the profession are apathetic.

We believe this office is second in importance only to that of the Director-General. As we have before stated, the hygienic and climatic conditions are unique in this case. A summer like the present will present many new and anxious problems.

Many of these problems have to do with the care of those who will suffer from the intense heat—worn-out by the exigencies of travel and sight-seeing. Then all of the medical and surgical necessities will be present. Scarcely less important will be the ability and tact of the Medical Director in suppressing unfounded rumors, and commanding confidence through the press in the face of any emergency.

It is more than possible that some time during the exposition season there will be a scare—a dysentery, sunstroke, bad water, or small-pox. Even if unfounded, it will do untold injury to the fair. In such an emer-

gency the Medical Director must not only be a good practitioner, but a man of tact and control.

We ask that the appointment be made with the same care that is being used in the selection of the Director-General. He should be a man of experience, a man of executive ability, a man who has the confidence of the best members of the profession, one who combines knowledge and wisdom. It is an office which should seek the man. And we are unwilling to believe that personal pulls, drummed-up influence and bargaining will receive consideration in the selection. Our directors will give us a good, strong, useful, capable man.

KOCH'S EDICT.

Robert Koch, he of tubercle bacillus fame, has recently delivered an address on tuberculosis before the British Congress of Tuberculosis that has been almost as widely discussed as was his original paper on the cause of tuberculosis in 1881. At that time Koch came out with the cause of consumption—a discovery than which there is hardly a superior in the history of medicine. At this time Koch advances statements that are hardly in accord with what years of rational thinking has led most scientists to believe. In the present paper, the contents of which have unfortunately reached the lay press, as usual, in distorted form, Koch advances the idea that bovine tuberculosis is not communicable to man, and offers experiments to show that human tuberculosis is not capable of being carried to cattle. It seems that Koch carried on experiments for a period of six months or more, feeding cattle (pronounced free of tuberculosis by means of the tuberculin test) with human tuberculous sputum and even injecting them hypodermically with human tubercle bacilli in sputum. In none of these experiments was he able to produce tuberculosis in cattle. He concludes from this that it is impossible for cattle to contract tuberculosis from man. This, he affirms, proves the non-communicability of human tuberculosis to cattle. In proof of the non-communicability of bovine tuberculosis to man he, of course, has no animal experiments. He cites in proof of it, however, that there are but rare instances on record of the finding of primary tuberculosis of the intestinal tract in man—a finding which should be common were it possible to contract tuberculosis from cattle through the agency of either tuberculous meat or milk.

Koch argues *in toto* for the duality or the tubercle bacillus. He believes that there is a specific tubercle bacillus which causes human tuberculosis and another distinct pathogenic bacillus that causes tuberculosis in cattle. What shall we say in criticism thereof? We have for years been taught to regard meat and milk from tuberculous cows as dangerous to man, and now are practically told that such meat and milk, tainted though they may be by a *bovine* bacillus tuberculosis, are harmless and may be ingested with relish and without fear by man.

In rebuttal thereof, it may be said with all due respect to the one-time great Koch, that the day has long since gone by when medical men accept in one gulp the dicta of one man, however great his prestige in science may be. We contend that Koch's experiments are not sufficiently extensive to justify him in making the sweeping assertions contained in his address. It may be well to recall Koch's insecure position when he launched his tuberculin and T. R. It may be well to recall his rather insecure position in regard to his contribution to the malaria question, and the charges made by the Italians of theft by the self-same Koch of ideas obtained from them while he was their guest, and published afterwards by him as orginal observations. Again we say, admitting Koch's great work on the etiology of consumption, we must accept whatever observations he may make with caution and with reserve. He has failed to prove that infants do not contract tuberculosis from tuberculous milk. He has failed to prove that man has never contracted a case of tuberculosis from the ingestion of tuberculous meat. His experiments are inconclusive. He has no justification in making the sweeping statements alluded to. Until more conclusive investigations are made, it is criminally wrong to allow the community to consume tuberculous meat and milk with impunity. It is indeed unfortunate that Koch's words have been quoted in the lay press, for the public are only too willing to accept as gospel truth what this supposedly infallible Koch has fearlessly asserted. Even though he were that one-time great Koch, we would still deny the truth of his conclusions and say "hold off until more work be done."

THE VALUE OF THE COLON BACILLUS AS AN INDEX OF SEWAGE POLLUTION.

The bacillus coli communis is a normal inhabitant of the intestinal tract of man. It is also found under normal conditions in the intestinal tracts of the lower animals. The colon bacillus of animals is in no way distinguishable from the colon bacillus which inhabits the gastro-intestinal tube of man. Yet bacteriologists have been content to find the colon bacillus in water and to affirm that such water is contaminated by human sewage. Where is the line of reason in this? It is positively true that the search for the colon bacillus constitutes the principal grounds for testifying, on the part of the bacteriologist, that he has undertaken a careful examination of water and finds it polluted by human feces, in case he finds the colon bacillus present. It is lamentable that this uncertain position has been taken by some of the active workers in water analysis. While it is true that the colon bacillus *may* find its way into a water supply from human feces, it is also true that it may be found present and yet may not have come from the intestinal tract of man or any other animal.

Among the first to call attention to the fact that the colon bacillus does not necessarily come from the human intestinal tract was Prof. Kruse. As early as 1894, this distinguished bacteriologist pointed out the error of

calling the bacillus coli communis an index of sewage pollution. Kruse said that the colon bacillus is found everywhere, in the soil, in the air, in water however pure it may be, provided enough of the water be taken for examination. Later, Weissfeld, an assistant of Kruse's at the University of Bonn, published his report on an analysis of fifty-six different water supplies, including springs in the forest, wells protected by every care against sewage pollution, etc. Weissfield found the bacillus coli communis in every case, whether the water was good or bad, and he inoculated animals with the cultures of the colon bacillus which he found. In some cases this colon bacillus was pathogenic for guinea-pigs, in others it was not so. There was no way of differentiating the colon bacillus which came from "bad" water from that which came from "good" water, in its behavior to guinea-pigs. In other words, a colon bacillus from a "bad" water would prove innocuous to guinea-pigs, while one from a "good" water would kill the pig straightway.

Thus it can be seen that the colon bacillus *is not* a positive index of sewage pollution, for the reasons stated above. Its presence in a given water supply *may* mean that the water is contaminated by human feces, but would not necessarily prove that supposition. The absence of the colon bacillus from a water supply, then, would mean that that supply is uncontaminated. Much more reliance is to be placed on the chemical analysis than upon the bacteriological analysis in getting the sum of the purity or impurity of the given water. The presence of the nitrates and nitrites in goodly amounts is of great significance in estimating the possibility of sewage contamination, if at the same time there be present a high percentage of ammonia.

To our mind, Professor Percy Frankland, who, as is well known, has had a large experience in dealing with micro-organisms in air and water, gives a good idea of the status of bacteriologic methods of water analysis in these words: "The detection of specific pathogenic bacteria in drinking water is now known to be beyond the range of practical politics, and the search for such bacteria is, in general, only carried on in deference to the special request of the layman, the uninitiated, or the hopelessly ignorant, whilst it cannot be repeated often enough that any feeling of security which may be gathered from an unsuccessful search for pathogenic bacteria is wholly illusory and in the highest degree dangerous. By far the most important service which has been rendered by bacteriology is the means which it affords of controlling the efficiency of filtration and other purification processes. The slightest irregularity or defect in the process of filtration is at once laid bare."

CLINICAL LECTURE.

LOCOMOTOR ATAXIA.[1]

By D. R. Brower, M. D., of Chicago, Illinois.

Professor of Nervous and Mental Diseases, Rush Medical College; Professor of Diseases of the Nervous System and Clinical Medicine, Northwestern University Women's Medical School, etc.

GENTLEMEN:—This patient is forty-eight years of age. He was admitted to the hospital two months ago. His father died at the age of ninety-four, and his mother at the age of eighty-three. He has been a heavy drinker. Two and a half years ago he took the Keeley cure, and since then he informs us that he has had no taste for liquors or for cigars. Of course, the effect of the Keeley cure in taking away his taste for liquor must necessarily be purely psychical. Indeed, the only advantage in the so-called Keeley cure is the psychic part of it; the rest of it, in my opinion, is injurious, as the subsequent history of this man shows. He has had none of the usual diseases of childhood. He has had delirium tremens. He denies having had either gonorrhea or syphilis. We cannot always believe patients in this particular, but I have reason to believe that this man is truthful in his statements, when he informs us that he has not had any venereal disease. Remember that. Just after taking the Keeley cure, three years ago, he began to have pains in the lower extremities. These pains were both localized and diffused. They were sharp and lancinating in character. They were attributed to sciatica. Subsequently he began to have trouble in urinating, shortly after which the urine would pass involuntarily. Some time after he had taken the Keeley cure, while traveling, he was thrown violently against the door of a railroad car in a collision, and some days thereafter the feet and ankles began to swell. The patient could not judge distance very well; he would take a misstep quite frequently. He could not go down stairs easily. At about this time pains began in the shoulder, abdomen and legs. He had attacks of vertigo. Up to the time of taking the Keeley cure he regarded himself as in fairly good health, except the disturbance that arose from the use of alcoholic stimulants. His pupils are unequal; they do not respond to light. They respond to accommodation, especially the larger pupil, but the smaller one makes a very feeble response. In addition to a history of pain we have the Argyll-Robertson pupil. I will ask the patient to cross one leg over the other so that we can test the patellar tendon reflex. There seems to be no patellar tendon response on either side. You should never reach a conclusion as regards the absence of patellar tendon reflex until you have instructed the patient

[1] A Clinical Lecture delivered at the Cook County Hospital and reported for Interstate Med. Journal.

regarding re-enforcement by having him pull vigorously on the hands with the eyes closed. Do not be satisfied until you have struck the bare patellar tendon, otherwise you may be deceived. Striking the bare tendon with the re-enforcement, we get no response. If you fail to get a response, test the muscles; see if there is any miotatic irritability in the femoris muscle. I get good response from the muscle at a certain point, so that the muscle has contractile power, but there is no patellar tendon reflex. Having determined the absence of patellar tendon reflex, it is important to find out the condition of the plantar reflex. By irritating the sole of the foot, if there is a plantar reflex we get a response, but we do not seem to get it in this case. The muscles of the leg and of the thigh have reflex power, yet there is absence of patellar tendon reflex.

This patient has an unusual degree of ataxia. Even with a very broad base he is unable to stand. From the symptoms we have elicited, and the unusual degree of ataxia, we may safely say that here we have to deal with what is known as tabes dorsalis or locomotor ataxia.

I have brought this patient into the amphitheatre for two or three reasons. *First*, because we may rest assured that in his case there is an absence of syphilitic history; there has been an antecedent history of alcoholism extending over several years, and he has taken the Keeley cure, which in my opinion is a very destructive cure. I have met many instances of insanity as the result of the Keeley cure. I have seen cases of myelitis as the outcome of the Keeley cure; also, cases of neuritis as the product of the Keeley cure, and here we seem to have a case of tabes dorsalis, the product of the Keeley cure, added on to alcoholism. This man was before the class a few months ago, on account of terrific gastric crises. He was suffering intense pain. It was this pain that brought him to the hospital first. The intense pain was more or less constant, and he had persistent nausea, with some vomiting.

There are some other signs of locomotor ataxia to be noted. I have previously told you that it is your bounden duty to recognize this disease in the preataxic stage. No student is justified in watching such a case as this for a long period of time without making a diagnosis. When these patients are seen in the beginning, do not let them pass as instances of sciatica. Do not pass them off, as they frequently are, as rheumatism. A patient came into my office to-day complaining of rheumatism, and said he wanted to be treated for it. He had made a diagnosis of rheumatism himself, for which he wanted treatment. It was a case of locomotor ataxia. There was nothing in his family history which pointed to rheumatism, nor in his antecedent history. People who have rheumatic diatheses, as a rule, have attacks of inflammatory rheumatism in early life. They usually get rheumatism before they reach the age of forty-five or fifty years. Rheumatism is essentially a disease of early life, and when patients come to you with aches and pains which they have diagnosticated

as rheumatism, you will find in the great majority of cases they are not rheumatic at all.

There are other symptoms of locomotor ataxia that are worth looking for. One of them is a sign to which I have previously directed your attention. It is not pathognomonic, but simply an aid. I refer to ulnar analgesia. If any member of the class will rub his ulnar nerve in the ulnar notch in the manner I show you (illustrating) he will find that it will cause considerable pain. The facial expression of this man shows that I am not making a painful impression. It is true he feels the pressure, but I do not inflict any pain. Along with ulnar analgesia we very frequently find marked diminution in pain sense throughout the whole territory. I am now pricking the patient over the distribution of the ulnar nerve, and while he feels the contact of the pin, he has no pain sense. There is analgesia in the area of distribution of the ulnar nerve. I presume the same is true of the other side. We will see. I find that he has loss of pain sense in the area of distribution of the ulnar nerve on the other side. This is a great aid in diagnosis.

Then we have Fraenkel's sign, which is an aid also in diagnosis. It has helped me materially in more than one case. It is this: If you will extend the thigh at right angles to the body you can bring the leg up in a perfectly straight line. This cannot be done to any member of the class without causing intense pain. The usual angle that the leg makes in that position is not manifest; the muscles are in a hypotonic condition. In other words, there is a lack of muscular tone. In this case the leg can be completely extended on the thigh, the thigh being at right angles to the body.

There is another interesting sign which is present in this case, and all these signs are aids in diagnosis. It is this: In very many of these cases there is an exaggeration of the abdominal reflex. We get a very lively or exaggerated abdominal reflex in this case. This case is typical of locomotor ataxia well advanced in the ataxic stage.

Another reason for bringing this patient here was to talk to you about the muscular exercise treatment of these patients, better known as the Fraenkel treatment. Such a patient as this, with a marked degree of ataxia, should have two parallel bars between which to stand. With the assistance of these parallel bars he should practice every day, standing with his feet as close together as possible. Every other day he should go through the same exercises with his eyes shut. Of course, it takes considerable practice. He should try to stand on one foot with his eyes open, and then do the same thing with his eyes closed. He should be instructed to go through these exercises with the eyes open first. He should be directed to stand with his feet as close together as possible until he can count ten, and then do the same thing with his eyes shut. Later on he should be instructed to stand on one foot until he counts ten, twenty, or thirty, and increase the time from day to day; then stand on the other foot until

he can do the same thing. After exercising in this way he should attempt to walk for some distance, increasing the distance from time to time. By carrying out the system of exercises recommended by Fraenkel, you will be astonished to see how these patients improve, and how they regain their power of co-ordination. In patients who have less ataxia than this man the difficulty of carrying out these exercises would not be so great. Those are some of the exercises for the lower extremities.

For the upper extremity we will have him touch his nose. He keeps at this until he touches it with the index finger of one hand, and then with the other hand, for ten or more minutes. Have him do it with the eyes shut. Persistence and perseverance in executing these various movements will result in great improvement in the power of co-ordination. I give these patients about twenty-four exercises, and these can be varied as desired. I have a list of probably thirty or forty exercises, and I mark twenty or twenty-four for each patient, emphasizing those exercises that seem to be indicated, according to the degree of inco-ordination. These Fraenkel exercises have been a wonderful advancement in the treatment of locomotor ataxia. Every day this man ought to go through this series of exercises, being careful not to carry them to fatigue. He should change the schedule a little from time to time as he gains the power of co-ordination and add other exercises, such as the Fraenkelinic series would indicate.

Locomotor ataxic patients need alteratives and tonics. In this man's case, in the absence of a syphilitic history, there is no necessity of pushing the alteratives very much. But a moderate use of the iodides, four or five grains three times a day, and the use of tonics, avoiding strychnia and nux vomica, would doubtless prove very beneficial. Erb taught us years ago that the progression of locomotor ataxia was made more rapid by the use of strychnia and nux vomica. Phosphite of zinc, preparations of phosphorus, syrup of hypophosphites, are the best remedies to use in this class of cases, with attention to elimination by the bowels and by the skin. Look out, too, for elimination by the kidneys. An admirable remedy to stop the pain in this man's case is the hydrobromate of hyoscin. I do not like to give these patients morphine, for the reason that it is comparatively easy to get them into the morphine habit. Hydrobromate of hyoscin, 1-100 of a grain, three or four times a day, continued for a week and then stopped, will do much toward lessening the pains in this man's case, and I have not heard of any one yet who has contracted the hydrobromate of hyoscin habit.

ORIGINAL ARTICLES.

THE GENERAL PRACTITIONER AND OPHTHALMOLOGY.

By John Green, Jr., M. D., of St. Louis, Missouri.

THE ophthalmic surgeon has too frequently to deplore the extreme unintelligence which often characterizes the treatment of ocular disease by the general practitioner. The latter, engrossed in the multifarious problems concerned with disease in general, has little time, and perhaps less inclination, to study the minutiæ of ophthalmic diagnosis and therapeusis; and it were an ill grace on the part of the ophthalmic specialist to cavil at the short-comings of his colleague in general practice, were it not that the latter, in the presence of disease of the eye, often throws common sense and his knowledge of pathology to the winds, and looks back to some miserable routine which comes to his recollection, dim and distorted, from the course in ophthalmology of his undergraduate days.

Undoubtedly the commonest delusion is the general notion that the sulphate of atropia is *indicated* in all forms of ocular disease. It is of very frequent occurrence that a patient suffering from a simple acute conjunctival catarrh comes to the oculist with widely dilated pupils. On inquiry, the fact is elicited that the family doctor had used "drops," shortly after which the patient discovered that he could not see near objects distinctly. Considerably purturbed and with a well-developed notion that he is rapidly growing blind, the patient is greatly relieved to find that, with the aid of plus spherical glasses, he can still see to read. The oculist has then to treat the simple catarrh plus the unnecessary mydriasis.

Of much graver significance are those unfortunate diagnostic blunders leading to the employment of atropia in conditions of glaucoma. It is not always possible even for the most experienced to affirm that a given case calls for the employment of a mydriatic; and in an ambiguous condition the mydriatic will be withheld until a possible glaucomatous element can with certainty be eliminated. On the other hand, the very uncertainty of the diagnosis will, in all probability, lead the general practitioner to employ atropia in the first instance, on the vague (and erroneous) theory that the drug is a "specific" in ocular disease, very much as mercury is a specific in syphilis. On the dire results of such haphazard therapeusis it were superfluous to dwell. Suffice it to say, that many an irremediably blind eye has been made so by this hit-or-miss method of employing a most valuable (and dangerous) therapeutic agent.

An opinion that is quite generally held by the laity, and is unfortunately shared in by many of the profession, is that a sore eye is very much of the

nature of a boil, and should be "brought to a head as quickly as possible." This fallacious belief, leading to the prolonged and indiscriminate employment of poultices (bread, milk, flaxseed, tea-leaf, etc., *ad infinitum et ad nauseam*) should be condemned in the strongest terms. In the presence of a corneal abrasion, poulticing (of the sort above alluded to) will almost inevitably lead to infection, with probable slough of the cornea, and possible panophthalmitis. The desired (?) result is thus obtained: the eye is "brought to a head" with a vengeance; and however useful the stump may be as a basis for an artificial eye, its function as an organ of vision is forever destroyed. The writer does not mean to affirm poultices have not a very valuable place in ophthalmic practice, but they should be used with extreme caution, and only when the patient can be continuously observed.

The use of plumbic acetate collyria has so frequently been condemned by the best ophthalmic practitioners, that it is somewhat discouraging to enumerate now and again a case of lead deposit on the cornea. We are credibly informed that sugar of lead is harmless provided the cornea is intact; but is it safe for the general practitioner to assume in a given case that the cornea has not become involved? Very minute epithelial denudations can only be positively discovered by painstaking inspection with the aid of oblique illumination and a strong convex lens, and sometimes require for their development a differential staining with fluorescein. It is not to be expected that the general practitioner will have at his command the above adjuncts to a correct diagnosis, and it were far wiser that he should employ astringents which have not that very serious drawback and are of equal therapeutic value.

Every physician, whatever his particular line of work may be, has been called upon, at one time or another, to remove a foreign body from the eye. If the fragment is loose in the conjunctival sac or lies superficially beneath the upper lid, no particular difficulty is encountered. A few strokes with a camel's-hair brush, or tooth-pick wrapped with absorbent cotton, will sweep away the offending particle. If the particle be imbedded in the cornea, it should be dug out with an ordinary foreign body spud, or a sickle-shaped knife-needle. Too often, however, the physician does not possess these very necessary instruments, and endeavors to make his sharp-pointed bistoury serve the purpose. With this instrument he will probably succeed in scraping off much of the epithelium along with the foreign body. He should bear in mind that neglect to deal with these eyes antiseptically for several days subsequent to the injury may lead to the development of an ulcer. A very useful anesthetic in these cases is holocain hydrochlorate in a one per cent. solution, which has the advantage over cocain that it does not dilate the pupil.

In concluding this short and necessarily incomplete catalogue of ophthalmic sins, it might be well to bestow upon the general practitioner the odium which he has rather skillfully evaded (but which justly belongs to him) for the mistaken but sadly prevalant belief that convergent strabis-

mus in young children should be allowed to go untreated until the age of puberty.

Unquestionably, this opinion is the outcome of woeful ignorance of the conditions of refraction underlying the trouble. More than eighty-five per cent. of the cases of convergent strabismus in young children are due to hypermetropia (Weekers). Even an elementary knowledge of the physiological connection between accommodation and convergence, and an appreciation of the fact that an increase in the power of accommodation (as in moderate hypermetropia) is inevitably accompanied by an increase in the degree of convergence, would save many a physician the expression of disastrous and misleading opinion.

The generally given advice—"delay treatment until the child is older" —is absolutely pernicious. Countless children have been condemned to surgical operation, with probable sacrifice of binocular vision, whose squint should have been absolutely controlled by the immediate application of appropriate glasses. Even squint occurring subsequent to diphtheria not infrequently proves to be of the ordinary type, and not dependent upon paresis of the ocular muscles.

The only safe course for the physician to pursue is humbly to confess his own inability to express an opinion, and admonish the immediate seeking of skilled ophthalmic advice.

EROSIONS OF THE STOMACH.

By M. D. SCHMALHORST, M. D., of St. Louis, Missouri.

THE most significant point in making a diagnosis of erosions of the stomach is the finding in the wash water. The stomach is washed out in the morning when the patient is in the fasting condition. If the return water is examined carefully a few pieces of mucous membrane are found, generally from one or two to four or five; these vary in size from a mere speck no larger than a pin head, to the size of a large split pea. They can be best recognized when the wash water is poured into a white flat-bottomed dish, where they look like small blood-clots against a white background. In cases of erosions these small pieces of the mucosa are always found in the lavage water, if lavage is done when the stomach is empty.

Such superficial exfoliations of the mucous membrane of the stomach are often found at the post-mortem table. The pathological anatomy of these exfoliations has been pretty thoroughly inquired into. In speaking of "Ueber geschwurige Processe in Magen," D. Gerhardt uses the following terms: "Sections made of erosions as a rule show that at the base of the ulcerations almost the entire lower half of the mucous membrane is

still preserved. In the epithelium of these remaining glands nothing remarkable can be discovered; at the sides the glands become longer; the first ones that are intact usually curve themselves over the defect and partly cover it. The recovery seems to take place by the simple after-growth of the gland remnants."

Very little work upon the clinical aspect of erosions has been done. It is only within the last few years that observers have grouped enough symptoms to make the diagnosis of erosions of the stomach. Chronic gastric catarrh is likely the cause of nearly all erosions. In rare cases the etiology is not apparent.

The symptoms of erosions are pain, which is not constant, more or less emaciation, and weakness. The pains come on when food is taken. The character of the food has nothing to do with the pains at all. After an hour or two they pass away. The weak feeling is accentuated when the pains are felt, and reaches the climax soon after meals. At times the patient is unable to accomplish anything for a number of days. A better feeling is experienced so long as absolute quiet is indulged in.

In nearly all cases of stomach diseases, if lavage is done, small pieces of the mucosa appears in the wash water. Such pieces are most likely to appear if there has been considerable coughing during the use of the tube. Blood is seen in such cases as these, and the return water will be tinted faintly or it may assume a very pronounced color, due to the amount of hemorrhage present. In instances of this kind the tube is responsible for the torn-off pieces. In coughing the stomach contracts rather violently against the end of the tube, which curettes off a piece of the membrane. Some hemorrhage naturally takes place. Such pieces are not to be confounded with those from an eroded stomach. Macroscopically the curettings are thicker and sections show the entire glands of the mucosa.

In erosions the peeling off takes place some time previous to lavage; and from the fact that these pieces are continually found when the stomach is washed out in a resting condition, leads one to believe it goes on continually and has nothing at all to do with the act of lavage.

It is not certain whether the same area is always involved or whether the exfoliation takes place here and there, each time at a different one. It is more than likely that the pieces come from a new field each time; for in the process of healing, even of a superficial wound, more or less scar tissue is left behind; this is more resisting and less likely to exfoliate than new areas.

At first thought one would think that in cases of erosions of the stomach there would be a direct cause for the development of ulcer; yet there does not appear to be any relation whatever between ulcer and erosion. Patients giving a history of erosions of long standing do not give history of any symptoms leading one to suspect ulcer.

The treatment of erosions limits itself to local applications. Silver nitrate applied directly to the mucosa acts in a very happy manner. This

is applied by use of the spray. About 10 c. c. of a 0.1 to 0.2 per cent. solution can be used. The beneficial results accompanying this method can be well illustrated by citing the following case:

Mr. H. P., aged seventy-three, has had stomach trouble two years almost constantly. Has had periodical attacks for the last twenty years. Pains very irregular, appearing after meals. The pains are not acute, but produce a general soreness over epigastrium. They may last a week or two, and during this time there is scarcely any appetite at all. Bowels irregular, generally constipated. Whole abdomen feels full; no inclination to be active. Physical examination negative.

April 26, 1901, test breakfast was given; after an hour an effort to draw it off was not successful. April 28th test meal again given and sufficient gastric contents taken off to filter 1 c. c. This showed total acidity 20. No free Hcl. and no lactic acid. The stomach was washed, bringing out the rest of the test meal. Up to this time no diagnosis was made. May 2d lavage was done upon an empty stomach, when four small pieces of membrane were found. The same thing took place the next morning. May 6th stomach was washed and 10 c. c. of 0.15 per cent. nitrate of silver solution sprayed directly into it. Two days later this treatment was repeated. Patient reports great improvement. After four treatments nothing appeared in wash water. Was given twelve treatments and discharged feeling well in every particular, and has remained so up to the present time. Later chemical examinations showed increased acidity, but no free acid has ever appeared. Rennel and pepsin were both present. He was given fifteen drops of dilute HCl. after meals.

No special directions were given to diet. Heavy meals, salads and pastries were not advised. HCl. was not given with any intention of assisting in the cure of the erosions, but to help protealysis. In most cases of erosions the acidity is very low.

The Limit of the Pupillary Reaction in Chloroform Narcosis.—Schleich says that in giving chloroform the pupil must be watched. It becomes smaller as the patient goes under the influence of the drug. Just enough chloroform should be given to keep the pupil a moderate size. Flockemann describes the first sign that the patient is coming to himself as follows: Though the moderately contracted pupil will react when one eye is opened, yet should both eyes be opened, the pupils become suddenly contracted. This he calls the limit of the pupillary reaction to light in chloroform narcosis. If the patient is still under the influence of the narcosis, a few more drops of chloroform are added slowly. If he is almost awake, they must be dropped on quickly. When the corneal reflex remains throughout the anesthesia, enough chloroform should be given till it disappears. Flockemann believes that the patient will be better off should this phenomenon be watched—*Centralblatt fuer Chirurgie*, May 25th.

INTESTINAL OBSTRUCTION FOLLOWING ABDOMINAL SECTION.

By Edward Wallace Lee, M. D., of St. Louis, Missouri.

IN DISCUSSING this subject I shall endeavor to confine my remarks to those conditions of obstruction which occur after an abdominal section not made to relieve obstruction. Of course, there are few conditions demanding abdominal section but what more or less obstruction exists.

After the section not only the patient but the operator is relieved if the patient has a free intestinal evacuation, and that is what we look for soon after the first day after operation. If the bowels do not act within thirty-six hours after abdominal section and no gas is passed, we at once begin to investigate for the cause of delay, for in ninety per cent. of cases it will indicate a condition which might cause trouble.

As the failure of the bowels to act is only a symptom, we must review every feature of the patient's condition before the operation, every step of the operation, and the condition of the patient at the time of closing the wound, for an exact knowledge of these features must be had before we can devise the proper course to produce relief.

If at the end of twenty-four or thirty-six hours we find the patient has passed gas or fluid contents from the bowel, the prognosis is favorable. If there has been no intestinal evacuation we at once inquire of the nurse what has been given the patient—has opium been administered? Has there been nausea or vomiting? Has the food been liquid or solid? Has the patient been restless? Has there been any rise of temperature? These questions are asked, and the answers will influence further procedure. If the answers of the nurse indicate that an obstruction exists, we at once proceed to make a careful physical examination. The history of the case, the character of the operation, and the condition of the patient will all enter into the making of our diagnosis and the treatment indicated.

The following are some of the causes which may produce an obstruction: Spasm of the sphincter, adhesions, gas, packing, drains, vaginal tampons, feces, and, worst of all, septic peritonitis.

Knowing that a cause exists, we must carefully differentitate and locate the exact one, for great harm may result if we attempt to relieve a volvulus by an effort at relieving an obstruction due to feces or a mild non-septic peritonitis.

After an abdominal section, no matter how simple, we are not easy until we know the patient has had a free evacuation of the bowels, and the first free flatus is more musical to me than the strains of the finest Italian orchestra. We can then leave the patient, knowing that one obstruction on the road to recovery has been removed.

A great deal can be done to prevent this condition arising. Of course, we see many cases in emergency where a thorough and scientific prepara-

tion cannot be made, and these cases often go on to a fatal termination because of the lack of this preparation. The mortality from gunshot wounds would not be so high if a man would take a bath before going out to be shot. It is to this that I call attention for preventing many of the cases of post-operative obstruction. It would be criminal for a surgeon to open the abdomen without taking the precautions to prevent this serious and often fatal condition.

The necessary preparation consists in a thorough antiseptic preparation of the patient. No one to-day would attempt to open the abdominal cavity without first seeing that everything possible was done toward placing the patient in a thoroughly antiseptic condition, externally and internally; and one of the greatest things is a thorough evacuation of the intestinal tract.

This first free evacuation of the intestinal tract is accomplished in the first place by withholding food. When necessary to prepare a patient three or four days before opening the abdominal cavity above or below the umbilicus, the preparatory treatment should consist in the withholding of food, high rectal injections, drinking a great deal of saline water, and one of the best agents is large doses of castor oil, to which one or two drops of croton oil have been added. It is said that castor oil tends to constipate the bowels; this is prevented by the addition of croton oil. Another thing is the divulsion of the sphincter. I have seen a patient suffering with an accumulation of gas, when if the sphincter had been stretched this would not have occurred.

When ready for the operation, the patient should be placed in the Trendelenburg position, if the character of the operation will allow this and it can be done. If the operation is in the pelvic cavity, by placing the patient in the Trendelenburg position, gravity will remove the omentum and place the intestines where they will not have to be handled, and they can be thoroughly protected by antiseptic gauze or rubber tissue. Therefore, I strongly recommend the Trendelenburg position. We should be very careful about the way we handle the intestines, and also in the way we break up adhesions. All adhesions and every raw surface after section should be protected either by adjacent portions of the omentum or by bringing the edges together so that every raw surface is closed and covered. This will obviate one form of obstruction—that due to acute peritonitis. Every stump should be covered, and instead of having a pedicle remaining, we should dissect out the vessels and ligate them, and whatever tissue is in connection with the organ should be stitched over the stump so that the edges of the incision are drawn in and nothing but the simple surface of the peritoneum presents. This removes another great source of danger—adhesions.

Again, to prevent adhesions and stimulate a mild peristaltic action, we should place a large amount of saline solution in the cavity. I also believe in administering a high enema before the patient leaves the table

or soon after being put to bed. This has a tendency to stimulate a mild peristaltic action and a free evacuation of the intestines. The cause of this intestinal obstruction, where it is not due to a septic condition, is due to a slight constipated condition, just sufficient to clog the bowels. After obstruction once occurs, there is an accumulation of gas, fermentation, etc., and the condition goes on to one of septic peritonitis.

Another thing in the treatment of these cases that I follow, though not many men who have had the experience I have had do so, I know, is to administer to the patient, after he is put to bed, small doses of morphine combined with small doses of sulphate of atropine. My idea in this is to prevent the patient from being restless, so that for a few hours after the operation the patient does not suffer from that restless condition so characteristic following abdominal operations. I believe the administration of small doses of morphine just after the operation or just after the patient is put to bed will relieve a great many of the symptoms that might otherwise come on.

Another point in the effort to relieve ordinary obstruction of the intestines after mild catharsis and enema have failed, is the insufflation of oxygen gas. Ever since hydrogen gas was passed into the rectum and through the entire alimentary canal, more or less experimentation has been going on. It was Dr. Clement Cleveland who first suggested the insufflation of oxygen gas for the relief of intestinal obstruction. This is done by passing the gas through a tank of water and introducing it per rectum. It acts as a general tonic and stimulant, and a slight peristaltic action is induced, while it removes any twists that may exist in the intestines, and often produces a free and active catharsis. Dr. Cleveland says: "I have been so impressed with the sufficiency of oxygen gas in every instance in which I have used it, that I design to employ it always after abdominal section as soon as any symptoms of obstruction begin to manifest themselves. By so doing I believe that many cases which might prove serious may be prevented from becoming so. They will certainly be relieved of much distress, and convalescence will be much more endurable. As a prophylactic measure, I look upon it as of the highest importance. Oxygen is easily obtainable, and, in fact, is always on hand in hospitals and sanitaria. Its use is not attended with danger, if ordinary care is observed. It can be introduced slowly, and to make sure of this it should always be passed through water in a flask which is made for the purpose, that accompanies the cylinder of oxygen. Used in this way it is perfectly safe, for the patient always indicates the moment when it is desirable to stop. As soon as there is decided pain and a feeling of increased distention, the gas should be cut off. I have never seen the slightest evil effects from its use."

After inflammation or peritonitis has shown itself, whether septic or not, if the patient shows a high degree of temperature and a commencing peritonitis, I believe the ordinary method taught to-day for the treatment

of this condition is wrong. Once it has put in an appearance and we know positively that it is there, I believe the treatment by active catharsis is absolutely wrong. That patient demands mental, anatomical and physiological rest, and I believe that rest can be promoted and carried out by hot applications, flaxseed poultices, or anything to maintain heat constantly, or, if you wish, cold applications; but there should be some application to the abdominal surface. It is here, also, that the proper use of opium is indicated, as opium can bring about that anatomical and physiological rest that the diseased condition demands. I believe the time will come when this will be the proper treatment for active peritonitis, and I believe we will save more people and do more good than by the active treatment by catharsis which is generally prescribed to-day.

A MILDLY INFLAMMATORY CONDITION OF THE SKIN COVERED BY GREEN SCALES PROBABLY PRODUCED BY THE BACILLUS PYOCYANEUS.

By Martin F. Engman, M. D., of St. Louis, Missouri,
Chief of the Dermatological Clinic, Polyclinic Medical Department Washington University, St. Louis, Missouri.

MR. L., age thirty-two, brunette, a well-nourished, healthy man. He came to me for an alopecia pityroides, and the very unique and interesting condition to be described. His scalp presented the usually mild seborrhoic eczema seen in pityriasis capitis with alopecia. He was a man of gentlemanly appearance, and gave the impression as being one who took great care of his person. He was neat and clean. After examining his scalp, he asked me to look at a peculiar condition which he had had for some months upon his thigh and scrotum. He said he had consulted a well-known local genito-urinary surgeon about it, who had advised him to see a dermatologist. Upon exposing his scrotum I at once noticed that the silk suspensory bandage which he wore had a greenish stain upon it; the bandage was quite damp from perspiration, and the fiber of which it was composed was completely stained a deep green color where in contact with the skin. The straps of the bandage were likewise stained where they came in contact with the skin in passing over the perineum and thighs. Upon removing the suspensory there was disclosed a most peculiar condition. The scrotum, especially upon the left side, the upper inner part of the thigh, the part in contact with the scrotum and slightly beyond and somewhat upon the perineum, were covered by small dry scales of a deep green color. This condition was most marked upon the left side, being the one upon which the patient "dressed," but the right thigh in

the same position was also effected, he having "dressed" on that side at intervals. The parts presented no abnormal moisture, weeping or discharge, only the natural humidity of this locality in hot weather.

Closer inspection disclosed a slight redness underlying the scaly area, but this was very mild indeed. The scales were small, about one-eighth of an inch in diameter, of irregular shape, very dry upon the thigh, and were very superficially placed and thin. They were attached to the underlying surface by their centers, the edges being slightly curled, and were very easy to remove. Upon first glance the surface seemed to be completely green, but closer examination disclosed the fact that the scales alone were colored, and that these were placed very near each other, leaving very narrow little channels of mildly reddened skin between them. Very gentle scraping with the back of a knife-blade dislodged a small pill-box full of these scales, which, when heaped up in the box, gave an almost green metallic shimmer. The surface from which they came was perfectly dry, showing only mild inflammation by its slight abnormal redness.

Therefore, we have here a dry, scaly, mildly inflammatory condition which is not unique, but the color of the scales renders it at once of the greatest interest.

Subjectively there were no symptoms; only at times a slight itching, which occurs in this region normally. The patient stated he had always had some slight scaling upon his scrotum and left thigh at points of contact—not more, he thought, than normally exists there. About six months before his consultation he had noticed a green stain upon his suspensory, but thought it due to accident. He soon noticed this staining would recur whenever he perspired freely, and he then thought it due to some medicine he was taking. He asked his physician if this could be possible, who answered him it could not. About three months or so later the discolorations upon the suspensory increased in area, and in the last month, since the weather has been so warm, it has rapidly increased. Only a few days ago he noticed the green scales, when he became alarmed and asked his physician again about it, who examined him and advised his consulting a dermatologist. The patient gives no history of having had green pus, or of having been exposed to it. He had had a gonorrhea some two years ago with subsequent bladder complications, but never any greenish discharge. Nor was there anywhere over this affected area pustules or thickened patches. The region cited was the only part involved, the axillæ and other points of excessive perspiration were free from discoloration. The suspensories had been frequently washed, therefore no chemical contained in them could react with some principal in the sweat to produce this discoloration, with subsequent staining of the scales.

There could be no suspicion of malingering, as the appearance of the little green scales with the minute intervening almost normal channels could not be artificially produced, even were the patient subject to suspicion.

A small scale was placed upon a glass slide, a drop of acetic acid added; another glass slide placed at right angles across it, and a rotary motion employed until the scale became thoroughly macerated and divided, when the slides were quickly pulled apart, dried in the air, fixed in the flame, washed with ether and stained. Such slides showed cocci and bacilli, the latter far exceeding the former in numbers. Preparations of scales made by maceration in sterile water showed these bacilli to be actively mobile.

An emulsion of the scales was made with sterile water, and various culture media were inoculated with this. The dry scales were also rubbed over various media. In both cases typical cultures of the staphylococcus pyogenes albus, and the bacillus pyocyaneus were obtained.

The rôle of the bacillus pyocyaneus in diseases of the skin is usually limited to the infection of wounds and ulcerative conditions, ulcers, etc. Often have I seen such a complication with quite a good deal of sloughing. I remember a syphilitic ulcer of the foot which broke down very rapidly after being infected by this bacillus. But my personal experience with this bacillus in skin diseases does not extend further than this. Other experiences also seem to have a similar limit, for in going over the literature to which I have access (though it is, unfortunately, not extensive) I find only a few references to its role in other dermatoses.[1 2 3]

Whether in this case the initial inflammatory symptoms with the scaling were produced by the bacillus pyocyaneus or the staphylococcus pyogenes albus is impossible to say. The staphylococcus pyogenes is no doubt a cause of dermatitis more often than is thought.

Many besides myself have produced marked inflammation of the skin with this coccus; but in this case the inflammatory symptoms were so mild, without any symptoms of thickening, pustulation or weeping, the usual results of *staphylodermia*, that I am inclined to attribute the condition under discussion to the b. pyocyaneus. In the majority of cultures from the skin we will find the staphylococcus an ever-present organism, entering with more or less energy into almost all dermatoses—a constant complicating factor. In this case it seemed to have acted with extreme indolence, while the b. pyocyaneus was apparently quite active, judging from its obvious contribution to the condition—the greenish discoloration or coloration of the scales. Thus, on purely theoretical grounds, I would consider the b. pyocyaneus the active agent.

2608 Locust street.

1. Ehlers found the b. pyocyaneus in echthyma tirribrant in children. *Viertelj. f. Derm. u. Syph.*, vol. xi. (1884), p. 117. Quoted by Crocker, p. 369.

2. Kreibich found b. pyocyaneus in echthyma gangrenosum in children. *Arch. f. Derm. u. Syph.*, Bd. l., Heft i.

3. A. Baginsky found b. pyocyaneus in echthyma gangrenosum in children. *Arch. f. Kinderh.*, Bd. xxviii., Heft i. u. ii.

MEDICAL AND SURGICAL PROGRESS.

SURGERY.

Edited by NORVELLE WALLACE SHARPE, M. D., President Medical Society, of City Hospital Alumni.

Brinckner (*International Journal of Surgery*, Vol. XIV., No. 7) in a brief article makes certain practical suggestions regarding the competency of surgical assistants. No one who has ever been compelled to work aided by awkward, ignorant or even merely untrained men as assistants can take exception to the reasonable requirements there laid down. If criticism be made, it would develop the fact that Brinckner's requirements are too lax. "Always there but never too much there" is a rule excellent as far as it reaches; but to-day when so much of our heavier operative work depends on technical skill in detail for its successful results, it must must be conceded that efficient assistants must be developed in both quantity and quality. A few simple points point the moral and adorn the tale of suggestions that should be of special value to those who but occasionally "assist."

Wallace (*The Lancet*, 4063) in an address upon "Tumors of the Bladder and Enlarged Prostate," gives an interesting discussion of these topics; interesting chiefly in its lack of touch with modern thought and work. He disclaims any excellence in Peterson's rectal bag or any other means by which the bladder may be elevated. He prefers vesical inflation by fluid rather than by air, and suggests that the solution may be prevented from escaping by thrusting in a finger through the suprapubic wound. Claims that "primary union should not be aimed at." In prostatic work he advises "a silver catheter" as second choice to "a red rubber catheter." Says "a gum elastic catheter is not good." A similar haziness of thought and language prevails in his views of current operative procedures. His "lubricant" consists of vaseline 6, eucalyptus 1, in collapsible tubes. (No suggestion regarding sterile products offered.)

Bishop (*The Lancet*, 4063) records briefly "an undescribed innocent (?) growth of the gall-bladder." The interesting points noted were a multilocular cystic desquamation of the bladder, attaining the size of "a child's head," and the extirpation of the mass with suturing of the pedicle to the lips of the incision in order to avoid the risk of leakage which might follow segmental ligaturing, the growth of the tumor downward forbidding a single mass ligature. Patient has recovered satisfactorily, a cholecystenterostomy will doubtless follow. The laboratory diagnosis is inconclusive, save that malignancy does not seem evident. There had apparently been hypertrophy of the mucous lining of the wall, with im-

mense development and distention of the glandular layer. The illustrations attain the usual level furnished by *The Lancet.*

Hayward and Henderson (*The Lancet*, 4062) record a case of spontaneous amputation of the greater part of the tongue by multiple epithelioma. Nothing especially noteworthy is presented, save that about two months after coming under observation the distal portion of the tongue was cast off. When first seen an excavation about ½+1+-inch, directed downward and toward the hyoid, with occasional severe arterial hemorrhages constituted the objective picture. The progress of the growth was not unusual, the ulcer diminishing in size coincidently with increasing rigidity of the tongue as a whole. Pain was marked; and the reporters feel that a free use of opium, in their hands, prolonged the life of the patient by about two months. Mouth washes and b.-eucain were employed as needed. No operative measures were instituted.

Freiberg (*Cleveland Journal of Medicine*, Vol. VI., No. 7) emphasizes that knee-pains are caused not only by the well-known agents proximal to this joint, but that they may have origin lower down the limb. His conclusions are:

1. That abnormal conditions of the foot may be the cause of pains in the knee, with or without themselves presenting subjective symptoms.

2. Pronated and flat-foot being the most frequent cause of this character, it is possible for shortening of the calf-muscles to be the underlying cause of such knee-pain in the presence of pronated foot or of contracted foot.

3. The attachment of the calf-muscles to the knee-capsule through the medium of the plantaris may serve to explain this phenomenon.

Of collateral interest, Pal (*Wien. med. Woch.*, 14, p. 666) describes six cases of meralgia paræsthetica caused by flat foot. This group of symptoms was made to disappear by a mechanical treatment of the foot.

Finney and Pancoast (*Bulletin of Johns Hopkins Hospital*, Vol. XII., 124) describe "a portable operating outfit," which consists of a trunk and a tray; the latter is of service as an instrument table. Both sections of the trunk and the tray are provided with legs, by means of which they can be converted into an operating and instrument table, respectively. The trunk is divided into compartments suitable for nested bowls and pans, boiler, instruments, dressings, solutions, and the usual surgical paraphernalia. A lift for securing the Trendelenberg posture is included, and the whole so planned as to secure the greatest amount of utility with a minimum of lost space and inconvenience. The ultimate dimensions as a table are 70x18¾x35 inches. Gross weight of trunk and contents, 115½ pounds.

Halsted (*Bulletin Johns Hopkins Hospital*, Vol. XII., 121–123) discusses "Retrojection of Bile into the Pancreas a Cause of Acute Hemorrhagic Pancreatitis," and submits in evidence a case. This individual had been subject to attacks of "vertigo" and "indigestion" for several years. He was seized suddenly with a severe abdominal pain, after several days of indigestion, during spring of 1901. He was nauseated and complained of "gas in the stomach." Appropriate treatment was given. For twenty-four hours he was relieved. Later, pain became severe; morphine failed to relieve. Chloroform by inhalations proved necessary. Patient became nervous, pain intense over the epigastrium, most marked to the right of the umbilicus, moderate cyanosis present. When operated upon next day, cyanosis had increased. Blood-stained fluid escaped from cavity, and fat necroses were wide-spread, particularly in the omentum, mesentery and curvatures of the stomach. No tumor found; peripancreatic tissues slightly infiltrated with blood-stained serum, and a distended common bile-duct were the most noticeable features. No stone found. Death in twenty-three hours. Emphasis, as a diagnostic aid, is laid upon the slightly cyanosed field covering the point of greatest tenderness. A minute stone was discovered at antopsy.

The conclusions of Halsted upon this disease are as follows:

Why is pancreatitis hemorrhagica acuta such a rare disease?

1. That bile may be retrojected into the pancreatic duct the stone must be (*a*) too small to occlude the pancreatic duct or interfere with the force of the jet, and at the same time (*b*) too large to pass the papilla.

2. A narrow papillary orifice, such as we found in my case (a rare condition) would predispose to this affection, because many stones small enough to fulfill (*a*) the first condition are too small to fulfill (*b*) the second.

3. One calculus would be more likely to cause the pancreatitis than several; for other stones in this duct, unless very small, would weaken the force of the bile-spurt which drives the ball-valve against the papillary orifice.

4. The gall-bladder must perhaps be normal or nearly so, not thickened, shrunkened or weakened by inflammation. Accordingly one must have a calculus or calculi which have produced insignificant changes, if any, in the walls of the bladder.

5. A predisposition may be necessary, as is given by adiposis and excessive use of alcohol.

GYNECOLOGY AND OBSTETRICS.

Edited by HUGO EHRENFEST, M. D., Consulting Gynecologist, St. Louis City Hospital.

Vaccination of Pregnant and Puerperal Women and Newborn Children.—(Palm, *Monatschr. f. Geb. u. Gyn.*, Vol. 13, 1901.) A case of small-pox occurring in Goettingen necessitated the preventive vaccination of all the inmates of the maternity hospital of this city: namely, ninety-two pregnant and puerperal women and seventy sucklings. Neither pregnancy nor the puerperium were influenced, and the condition of the children also did not seem to be affected. The possible immunization of the fetus by vaccination of the pregnant women during the latter stage of pregnancy is denied. In forty-three cases the vaccination of the newborn was effective, although the mothers were vaccinated within six to one hundred and fifteen days previous to confinement.

Small-Pox in the Newborn.—Roger (*Societe med. des hopiteaux*, Paris) reports his experience with eleven cases of small-pox in pregnant women. All the children were apparently well at the time of delivery. With a single exception, they soon afterwards showed a temperature as low as 28° to 31° C. and died. Seven of these children between fifth and seventh day developed an exanthem, which, in some instances, had the characteristic appearance of small-pox pustules. Only one child survived. It is noteworthy that the mother of this child was vaccinated during pregnancy.

Myomectomy of Nine Myomas During Pregnancy and Delivery at Term.—John Duncan Emmet (New York) extirpated in a woman, about three months pregnant, nine myomas, one of which was deeply interstitial. The patient made a perfect recovery, and gave birth at full term to a well-developed child. Delivery and puerperium were normal. This case is interesting from more than one point of view. First, it confirms the fact emphasized by many authorities, that pregnancy must not be considered a contra-indication for operation, not even if the field of operation be the neighborhood of the uterus itself. Furthermore, Emmet, taking into account his case and the statistics of different surgeons, shows that conservative myomectomy is to be given preference in general to radical hysterectomy. Pregnancy presents a special indication for the conservative procedure, as it offers the possibility of saving the child's life.—*American Medicine*, June 29, 1901.

On the Treatment of Pruritus Valvæ.—(L. Siebourg, *Centralbl. f. Gyn.*, June 29, 1901.) First of all, those conditions which either are causative of this disease or militate against the healing are to be removed. An exact urinalysis is of great importance. The diet has to be regulated. Alcohol and highly seasoned food should be interdicted. Patients are to be

left alone as little as possible, in order to prevent rubbing and scratching the vulva. The finger-nails should be kept short. The diseased parts are washed with soap and cold water at least twice a day, especially after the patient has urinated. The following ointment gave good immediate and lasting results:

℞ Cocaine ..... 2.0 grammes
Orthoform ..... 1.5 "
Menthol ..... 0.5 "
Acid carbolic ..... 1.0 "
Vaselin ..... 20.0 "

If there are small excoriations, they should be cauterized with a ten per cent. solution of nitrate of silver. If the condition is chronic and the skin is not abraded, the following solution should be applied:

℞ Spirit. rusci ..... 50.0 grammes
Acid. salicyl ..... 0.5 "
Resorcin ..... 1.0 "
After thorough cleansing apply with a soft brush.

Latterly the writer has found that the subcutaneous injection of about 300 cc. of normal salt solution gives good results. The injections had best be given in the evening. He explains their efficacy in this way:

"The injected fluid puffs up the skin, thus stretching the ends of the nerves, and produces a local anesthesia analogous to the anesthesia of Schleich's method."

Diagnosis of Tumors of the Frontal Lobes.—Hoeniger reports several cases of tumor of the frontal lobes in the *Muench. med. Wochens.*, May 7, 1901. The first case, a woman of fifty, one year after the climacteric, developed melancholia and suicidal tendencies. The patient also had slight paresis of muscles of the right side of the face, followed by persistent agrypnia, then vomiting and twitching of the hands, and a peculiar staggering gait. Later a left-sided hemiparesis followed. She finally died of exhaustion. This patient developed a tendency to make jokes; and the same thing was observed in a second patient. Hoeninger ascribes this phenomenon to an irritation of the motor speech center. He supports this hypothesis with numerous examples from his own clinical experience. The writer says that it is permissible to draw conclusions from these cases as follows: We may think of tumor of the frontal lobe if the earliest symptoms are psychical in character, or, if in the course of the disease, psychical symptoms are more pronounced. The diagnosis becomes more certain if there are cerebral atopia, spasms of the muscles of the trunk or disturbances of speech. In addition there may be motor disturbances as symptoms of nervous lesions.

MEDICINE.

Changes in the Bone Marrow in Leucocytosis.—Ruberstein, in the *Zeitschrift fuer klinische Medicin*, Bd. 42, Hefte 3 and 4, details a method of excising a portion of the ribs of rabbits and carefully counting all the different varieties of cells in sections of the marrow, and at the same time counting carefully the white cells in dried preparations of the blood. Immediately thereafter the rabbit was injected with a leukocytotic; he used chiefly streptococci cultures, turpentine, deuteroalbumose and extract of spleen. The results from these substances were equally good. The conclusions that he reaches are that leucocytosis (purely in the sense of an increase of other cells than the lymphocytes) is a function of the bone marrow only.

Stricture of the Pylorus without Retention of Gastric Contents.—Suopault (*Gazette des Hopitaux*, July 16, 1901,) speaks of stricture of the pylorus without a retention of the stomach contents. He claims that stricture can exist without stopping up the outlet. These cases show clinically their presence by simple functional trouble in the stomach, sometimes hours after the ingestion of food. The evolution of such a case is somewhat as follows:

The symptoms show themselves in a succession of attacks, which gradually begin to increase in frequency until they are continuous. After probably ten or twelve years' standing, the patient is bothered all the time by the symptoms of retention food. Surgery offers the only relief, of course, both as a means of making a positive diagnosis and as a cure.

Variability of Alexines in Pathologic Sera.—Camus and Pagniez have studied, according to the method of Homberger, the hemolytic action exercised by serum in individuals suffering with different diseases. They found a protective serum in man in different diseases which contains an alexines which protects animals to some extent against pathologic conditions.—*Le Progres Medical*, July 20, 1901.

Juvenile Progressive Paralysis.—J. A. Hirschel reports four cases of juvenile form of progressive paralysis (*Wiener klin. Woch.*, No. 21). The juvenile form has for its etiology congenital syphilis. Together with the paralysis there is present sometimes simple dementia or hypochondriacal states. Post-mortem findings in these cases show diffuse cerebral sclerosis with severe leptomeningitis.

The Inoculation of Rabbits with Variola.—Roger inoculated a rabbit with the pus from a case of variola; death followed after the appearance

of discrete pustules. Some animals resist variolization, dependent upon the resistance of the particular animal and the virulence of the variolous pus. Animals which are well fed resist better than those poorly nourished.—*Le Progres Medical*, July 20, 1901.

Treatment of Sciatica.—Leri has treated cases of sciatica by epidural injections of cocaine; this is the treatment of choice, while intra-arachnoidal injections are not so good, because the effects are not constant and the procedure is hazardous.—*Le Progres Medical*, July 20th.

Grippe Simulating Typhoid.—Roustan has studied a form of grippe in Cannes, where abdominal pains were very pronounced, simulating typhoid fever.

Stuporous Melancholia Lasting Three Years and Eight Months, Followed by Recovery.—The August issue of *Medicine* states that MacCoy, in the *Journal of Nervous and Mental Diseases* for July, 1901, describes a case which seems to be almost unique in asylum annals. The patient was twenty-eight years of age, of intemperate habits, with a specific history. He was admitted to the asylum with a statement of the duration of this mental trouble of two weeks. From November, 1895, to September, 1896, the history was that of an ordinary melancholia. In the latter month he passed into a condition of stupor, refusing to leave his bed, or voluntarily to take any nourishment. He remained in this state until May, 1900. During all this period he was fed three times a day by a nasal tube, receiving at each meal a pint of milk, two eggs, some salt, and sugar. To prevent bed-sores his back was daily rubbed with alcohol, and several times during the day he was turned from his back to his right or left side. In May, 1900, he began to show signs of returning mental activity; occasionally he would open his eyes and wink for several minutes at a time, and shift himself about in bed to assume a comfortable position. The following month he sat up and ate a meal for the first time in three and a half years. Later he was dressed, and since then his condition has justified his discharge as recovered.

Treatment of Chronic Hydrarthrosis of the Knee.—Ballenghien reports a case of hydrops articuli in a man of twenty-eight (*Journal des Sciences Med. de Lille*, No. 17). He had already had his knee treated by igni-puncture, after which the effusion returned. The next year it was again punctured, and again the year later, but it returned. Then the right knee became infected. No cause for the condition could be found. The left knee was incised and irrigated with carbolic acid solution 1–20. He recovered. One danger in this method is that of absorption of the carbolic acid.

OPHTHALMOLOGY.

Edited by JOHN GREEN, JR., M. D.

Cases of Congenital Word-Blindness.—(E. Nettleship, London. *Ophthalmic Review*, March, 1901.) Hinshelwood (*The Lancet*, May 26, 1900,) published two cases of "inability to learn to read" in boys, aged respectively ten and eleven. The first case recognized only a few of the letters of the alphabet, and "was unable to read any words at all." He recognized numerals with difficulty, but pictures and faces readily.. His "auditory" memory of letters and words, on the other hand, was excellent. The second case could read the alphabet and common small words, such as "the," but uncommon small words, such as "tub," only after spelling them aloud. Numerals were read easily. Both boys were, in other respects, bright and intelligent. Hinshelwood ascribes the difficulty to "organic deficiency in the part of the brain where the visual impressions of letters and words are stored."

Nettleship reports five cases, as follows:

CASE 1.—C. R., male, aged eleven, reads with extreme difficulty; easily comprehends what is spoken to him, and "can pronounce words spelt out to him, and spell words that are spoken to him." Vision: 20–20, tardy recognition. No accommodative trouble. Jaeger, 1 and 10, were read very slowly and *with equal difficulty*. A word spelled out to him was recognized at once. No abnormality in the fundus. Fields and color sense normal.

CASE 2.—C., male (young boy, age not given), "hardly knows even short words when he spells them; he takes in what is read to him, but not what he reads." No ocular abnormality existed. He subsequently learned to read easily.

CASE 3.—M., male, aged nine, was "backward in reading," otherwise a bright boy. Vision was normal. Jaeger, 1 and 10, were read slowly and with equal difficulty. There was a slight refractive error.

CASE 4.—G., male, aged twenty-three, "always a slow reader, bad speller and unable to do paper work." "When he tried to read quickly he put the syllables of the longer words in the wrong order." "He remembered words by sound, but could not reproduce them by spelling or writing. He had a slight hyperopic astigmatism with the rule.

CASE 5.—L., female, aged twenty-one. "In reading she put in words that were not there, and could not easily pass from one line to the next." Needlework occasioned no difficulty. Vision, 6–5. Two brothers are stammerers.

Nettleship notes that in his series eight out of nine cases were males, but suggests that "the tendency to condone difficulty in reading in a girl may have led to cases being overlooked in females." It is of the greatest

importance to determine whether the condition is amenable to treatment or is irremediable. In the former case, the best results will probably obtain from the old plan of teaching a child his letters and giving methodical instruction in reading from the earliest age. In the latter case Nettleship suggests that the attempt to teach the child to read be abandoned, and special methods analogous to those employed with "backward" and "defective" children be resorted to.

Changes in the Fundus Oculus in Pneumonia.—(A. Peters, Bonn. *Klin. Monatsblaetter fuer Augenheilkunde*, May, 1904.) It has long been known that pneumococcus metastases occasionally gives rise to grave ocular infections in the form of suppuration of the vitreous and panophthalmitis leading to unilateral or total blindness. Of more recent date is the knowledge that less extensive fundus disturbances may originate from emboli. Vision is only slightly impaired, and the lesions are capable of complete resorption.

The principal subjective symptom is disturbance of vision. In one case the patient observed "sooty clouds" in the periphery of the field. Eventually vision returns to normal.

The ophthalmoscope shows in the vicinity of the macula several round, gray-white patches, of one-third to one disc diameter. The borders are at first well defined, but later become blurred. Some of the spots are raised above the general fundus level. The condition finally clears up entirely.

The differential diagnosis between embolus and retinitis septica is often difficult. Peters suggests the following points:

Embolus.	Retinitis Septica.
1. Visual disturbance *may* date from the first day of the disease.	1. Visual disturbance always delayed beyond the first day.
2. Patches of infiltration are round or roundish	2. Patches are usually striated.
3. Patches may be raised above fundus level.	3. Patches are not prominent.
4. Hemorrhages absent.	4. Hemorrhages usually present.

The condition may also be mistaken for tubercle of the choroid.

Peters hopes that further observations will give additional points for diagnosis, and recommends systematic ophthalmoscopic examination in pneumonia.

Epicanthus.—(Foggin, Newcastle-on-Tyne. *Ophthalmic Review*, January, 1901.) Foggin has observed "more or less evidence of redundancy of the skin-fold at the inner eye angles" in a considerable number of newborn. With the growth of the nasal bones the condition almost invariably disappears. The proportion of cases of persistent epicanthus is exceedingly small.

The writer ascribes the condition to "incomplete development of the nasal bones" and "unusual tightness of the cheek tissues." Temporary obliteration of the fold may be produced by either (*a*) "pinching the skin of the nose-bridge," or (*b*) "gently pressing upwards and inwards the tissues of each cheek from the superior maxillæ toward the inner canthi."

Besides the congenital form, bilateral epicanthus may occur subsequent to necrosis of the nasal bones. Unilateral epicanthus is an occasional sequel of burns, scalds and destructive blepharitis.

In congenital epicanthus with extremely flat nose-bridge, Foggin has used a form of spectacle pince-nez which serves the double purpose of "neutralizing" the tightness of the cheek muscles and relieving the pressure from the bridge of the nose. Orthopædic methods failing, the writer has employed the following operative technique: The tissues of the nose-bridge and epicanthal fold are detached freely by a Græfe knife introduced subcutaneously on either side of the nose. Sutures are introduced and firmly secured to two lead plates shaped to conform to the contour of the nose. The plates are left *in situ* a fortnight.

Of two cases operated by this method one was unsuccessful, owing to swelling and pain, which necessitated the removal of the sutures. In the other the result was very gratifying.

The advantages of the method are:

1. Complete obliteration of the epicanthus.
2. Increased height of the bridge of the nose.
3. Avoidance of the central nasal scar of the von Ammon de Wecker and Sichel operations.

Loss of Pupillary Reflex in Its Relation to Syphilis.—Babinski and Charpentier, *Annals d'Oculistique*, July, 1901.—The authors affirm that permanent loss of the pupillary reaction to light, when not dependent on disease of the glote optic nerve or paralysis of the motor oculi, is an almost pathognomonic sign of hereditary or acquired syphilis. They conclude that the loss of pupillary reflex indicates that the disease has invaded the central nervous system and that the patient is a candidate for tabes, diffuse meningo-encephalitis, or cerebro-spinal syphilis. In view of the fact that vision is not impaired, attention is not likely to be called to the eyes, and the phenomenon is apt to be overlooked. They suggest that determination of the pupillary reaction be made a part of the routine of all physical examinations.

PEDIATRICS.

Edited by A. Faller, M. D.

Treatment of Pneumonia in Children.—Louis Fischer (*N. Y. Med. Jour.*, April 27, 1901,) uses the following treatment in pneumonia among children, with onset of fever: One-drop doses of aconite every hour until six doses have been taken; half-teaspoonful doses of fresh spiritus minderein at same time, and continue until general diaphoresis is produced; a mustard foot-bath for two or three minutes will stimulate the circulation and promote diaphoresis and lower the temperature; give calomel until a liquid green stool is produced. Water should be given freely to aid in the elimination of toxic products and to produce diaphoresis and quench thirst of fever. Since children almost invariably swallow expectorated matter, an occasional dose of calomel or castor oil should be given throughout the course of the disease. Antipyretics of the coal-tar series should rarely be used; when used, they should be combined with musk or camphor. Sponging with cold water or acetic ether will usually reduce the temperature. When this fails, a cold pack in a wet sheet may be tried; and where severe nervous symptoms exist, a tub-bath of five minutes' duration, beginning at 90° F. and reducing to 70° F., is of great benefit. Vigorous rubbing while the child is in the bath must be practiced, and a few drops of Hoffman's anodyne should be given very young or delicate children before the bath. Intense dyspnœa is relieved by dry cups anteriorly and posteriorly over the thorax. In catarrhal pneumonia, when dyspnœa and cyanosis become pronounced, the alternate use of the hot and cold douche or the hot and cold bath will afford relief. Oxygen can best be obtained by proper ventilation, opening the windows and screening the patient from direct draughts. Where the cough is persistent and prevents sleep, give codeine in small doses; one-tenth of a grain, repeated in two hours, if necessary, is the proper dose for a child one year old. Good Tokay wine or diluted whisky must be given when a toxæmic condition exists; coffee, with very little sugar and milk, is an excellent stimulant.

Sociological Statistics in Medicine.—Under the heading "Soziale Medizin und Statistik," Dr. Arthur Ruppin presents in the *Deutsche Medicinische Wochenschrift*, June 27th, a very interesting, if not thoroughly trustworthy, article, in which he endeavors to demonstrate the influence of either parent upon the vitality of the child. Basing his conclusions upon Prussian statistics for the years 1875–1899, inclusive, the writer accepts the Jewish race as his starting-point. Among this race, during the period stated, the proportion of infants born dead was 32.07 per thousand; among Christians, during the same period, the proportion was 35.88; from these facts Dr. Ruppin endeavors, by manipulation of parents, to show which has the greater influence upon the vitality of the child. Going

further, the doctor shows that in intermarriages, where the father is a Christian and the mother a Jewess, the rate of infants born dead is 35.76, or nearly as high as when both parents are Christians; however, when the father is a Jew and the mother a Gentile, the rate falls to 33.17. The writer claims from these statistics, and not without some reason, that the father exerts more influence upon the vitality of the offspring than does the mother. The writer also adds that Christian-Jewish marriages (father Christian, mother Jewish) produce about 273 children yearly, while among Jewish-Christian marriages only about 244 births result—which, when we consider that more Jewish men marry Christian girls than *vice-versa*, adds additional proof to the well-known fact that Jewish women are more fruitful than Christian women.

Heart Lesions of Infancy and Childhood.—Dr. I. A. Abt, in the July number of *Medicine*, presents a very interesting article on this subject, in which he presents the following conclusions: Cardiac percussion in children is a more favorable procedure than in adults, since the relative dullness can be easily and accurately determined, due to the thinness of the chest wall, and also to the fact that the lung does not cover the child's heart to the same extent as in the adult. The pathological changes in the child's heart are simpler than those of the adult, as the blood supply, being greater, limits the production of chronic inflammation of the muscle and fatty degeneration. Brown atrophy is also very rarely seen. Diseases of the coronary arteries are rarely present in children; the various toxic agents, alcohol, lead and tobacco play no part in the diseases of the child's heart. The strain upon the child's heart is less than that upon the adult's, since it is relatively larger, while the arterial system is wider, thus lessening blood pressure in the aorta. Among causes of pericardial and endocardial murmurs, rheumatism, of course, is the most frequent; follicular tonsillitis plays an important rôle; scarlatina and pneumonia are important factors; gonorrhœa, rare in children, does not have the importance in the production of this variety of inflammation that it has in adults. Congenital heart disease occurred three times in fifty cases. Prognosis of endocarditis grave in early chilhood, because the condition is often associated with pericarditis, which condition leads to rapid cardiac dilatation, myocardial inflammation and adhesions between the heart and pericardial layers, mechanically interfering with the heart's action. Recurrent attacks of inflammation at the affected valves is frequent, each attack making the prognosis more unfavorable. If primary attack is mild with no recurrences, the prognosis, under proper treatment and hygiene, is good. Intercurrent diseases, as severe anemia, bronchitis, nephritis, pneumonia, or any acute infectious disease, greatly increase the dangers in these cardiac affections.

Traumatic Zona.—R. Millon, in the *Archives de Maladies des Enfants* for July, 1901, reports two cases of traumatic zona. This condition was

described as early as 1849 by Rayer; another case was published by Charcot in 1859. The peculiarity of the eruption is that it occurs in the region of a nerve which has received a traumatism; it is not accompanied by fever or other signs of infection, nor the general phenomena which commonly accompany zoster due to other causes. The first patient was a young girl who accidentally ran against a table, the point impinging on the anterior part of the thorax. For a moment the pain was severe, but it apparently passed off. Three days later the part became red, and a crop of herpetic eruptions appeared, surrounding the place where the blow had been received. The eruption extended around the chest. Pain and burning followed. There was no fever. The second case was that of a girl of thirteen years, who had noticed an eruption on the arm following a fall. The immediate effect was pain which was followed after two days by an eruption over the site of the injury. There was no fever or constitutional symptoms.

Early Recognition of Ear Disease in Childhood.—Yearsley, in *Pediatrics*, June 1, 1901, refers to the failure on the part of some practitioners to recognize adenoids as the cause of ear disease in children. Very often they are not made out until considerable thickening of the drum membrane has taken place. Whenever the drum shows a marked loss of transparency, and a dullness which resembles ground glass, it is almost certain that the case has gone too far for a recovery, or even an improvement. If the first two years of a child's life are passed without the acquirement of one or two simple words, it is probable that there is a defect in hearing. The early recognition of these defects is important, and it is better to resort to an examination under chloroform than to risk a possibility of the trouble becoming permanent. Discharges from the ear in children are always important, as are earaches. The ear may offer an explanation of many a puzzling febrile attack in children.

A "cold in the head" in children almost always affects the lymphoid tissue in the vault of the naso-pharynx, and accounts for the frequency of inflammation in the middle ear in early life. Such inflammations may give rise to meningitis, but more frequently simulate that disease.

PATHOLOGY AND BACTERIOLOGY.

Edited by R. B. H. Gradwohl, M. D.

Ankylostomiasis.—Mr. C. Le Neve Foster, D. Sc., F. R. S., in his report just issued for 1900 as His Majesty'a Inspector of Mines for North Wales, makes the following interesting allusions to this disease: "When I learned that the company owning the Frongoch mine in Cardiganshire had imported a number of Italian workmen, it occurred to me that they might unwittingly be the means of introducing ankylostomiasis, or miner's anemia, into this country. I at once put myself in communication with the mine doctor, who reported that certain of the men were ill and possibly suffering from that disease. I obtained samples of their evacuations and sent them to Dr. Malvoz of the Bacteriological Institute in Liege, who has had much experience in searching for the parasite among the miners in his own country. He reported that the men were free of that disease. It is well for the British employer to be on his guard against employing foreign workmen in mines, knowing that they are often the subjects of this disease. The importance of the ankylostomum duodenale is very great because it causes a severe and often fatal anemia. In countries where it is endemic, a very large proportion of the inhabitants are affected, and Dobson found in India in the stools of seventy-five per cent. of the persons to whom he had administered thymol. It is said to be discovered in the intestine of every person at post-mortem in Egypt. The disease, according to Cobbold, is not endemic in this country, and therefore every effort should be made to exclude it." (*The Lancet*, July 27, 1901.)

The Hereditary Arthritic Forms of Pretuberculosis.—Dr. G. E. Pspillon, of Paris, read a paper at the British Congress of Tuberculosis on this subject. In heredo-arthritic people, he said, the pretuberculous stage might be disclosed by arthritic manifestations, such as fits or asthma, attacks of subacute rheumatism, late appearance of *stigmates de l'arthritisme*. These were not tuberculous localizations, as the "tuberculous rheumatism" described ten years ago by Poncat, but only effects of the bacillary toxin. These fits of asthma, rheumatic attacks, arthritic deviations, etc., were the symptoms of hereditary disorder. They affected the contractility of the bronchial muscles, the secretion of the articular synovia, or the nutrition of the bone ends, cartilages, and periarticular muscles; they were the manifestations of a sympathetic reaction to tuberculous intoxication.

A Micro-Organism Found in Syphilitic Tissue.—M. Julien not long ago stated before the Academy of Medicine that in the blood and serum of syphilitic patients who had recently been infected, and who had not undergone any specific treatment, M. de Lisle and himself have confirmed the

presence of round, granular, highly refracting bodies such as have already been described by other observers. They have been unsuccessful in the cultivation and inoculation experiments with these bodies. This is not surprising, for it is known that syphilitic blood when coagulated is harmless, a pecularity which may be explained by the existence in the blood after coagulation—*i. e.*, in the serum—of an alexine which is strongly bactericidal. Researches have been undertaken as to the nature of the serum from a blister, whether produced by cantharides or by the actual cautery. Such serum they found to contain no alexine whatever. They did find, however, a polymorphic organism bacillary in shape and showing all intermediate stages between that of a slender rod and that of a long filament. The organism was mobile, staining easily with all the stains, but not by Gram's method. It produced paralysis and death in pigs. The organism is agglutinated by syphilitic blood.

Medical Society of the Missouri Valley.—The fourteenth annual meeting will be held in St. Joseph on Thursday, September 19th, and Eureka Springs, September 20th and 21st. The 'Frisco line will carry members free from Kansas City to Eureka and return. One fare for the round trip ($1.90) has been secured from St. Joseph to Kansas City. Pullman fare will be $1.00 each way, $2.00 for double berth, which must be remitted to the secretary before September 1st, in order that extra cars may be provided for the party. A daylight ride on the return trip may yet be arranged if a majority prefer it.

One day's scientific session will be held in each city, and last day will be devoted to sight-seeing at the springs. In the evening a reception will be tendered the association by the local profession and Commercial Club. The scientific program includes an illustrated pathological lecture by Dr. L. H. Warner, of New York city; addresses by Drs. C. H. Hughes and Frank J. Lutz, of St. Louis, and Dr. Frank Parsons Norbury, of Jacksonville, Illinois; an exhibition of specimens illustrating causes of uterine hemorrhage, by Dr. Palmer Findley, of Chicago; "Treatment of Obesity," by Dr. Harold N. Moyer, Chicago; "Some Twentieth Century Thoughts on Medicine," by Dr. Charles E. Davis, Eureka Springs, Arkansas; "Club-Foot—Its Modern Treatment," by Dr. J. W. Cokenower, Des Moines, Iowa; "Is it Rational to Operate Upon Every Case of Appendicitis as Soon as Recognized?" by Dr. Wm. Jepson, Sioux City, Iowa. Papers have also been promised by Drs. Flavell B. Tiffany, Kansas City; E. S. Pettyjohn, Chicago; Le Roy Crummer, Omaha; J. Homer Coulter, Chicago; W. O. Henry, Omaha; Chas. Geiger, M. F. Weymann, P. I. Leonard, and W. L. Kenney, St. Joseph.

Adolph Lorenz: Ueber die Heilung der angeborenen Hueftgelenks verenkung durch unblutige Einrenkung und functionelle Belastung. (On the Treatment of Congenital Dislocation of the Hip-Joint Without Operation.) With 84 Drawings. Published by Franz Deuticke, Leipsic and Vienna. 1900. Price, 10 marks.

Lorenz, whose merits for the development of conservative orthopedic surgery are well known all over the world, gives in this book an exact account of the course of treatment at present employed by him in cases of congenital displacement of the hip-joint. He gave up operative measures and claims to succeed in nearly all of his patients by conservative means. Out of 212 displacements, after the treatment the head of the femur was 108 times found in an about normal condition. The functional results were very satisfactory. He gives in detail the description of his method, which hardly could be explained here in brief. So we only can refer those interested in orthopedic surgery to this excellent book.

Laryngeal Phthisis. By RICHARD LAKE, F. R. C. S., Surgeon Laryngologist, North London Hospital for Consumption, etc. Philadelphia: P. Blakiston's Son & Co.

This is a very complete condensed treatise on a class of most difficult and discouraging complications. One of the most interesting chapters is that upon prognosis, in which the author records 48 cures in 329 cases. The illustrations are excellent. W. P.

Mouth-Breathing. By MAYO COLLIER, F. R. C. S. Eng., M. S. London, President of the British Laryngological, Rhinological and Otological Association. Henry J. Glaisher, London. 1901.

This monograph is intended to foreshadow a large work now in preparation. From first to last it is interesting and instructive. It is the clearest and most concise essay upon this much-neglected subject that we have seen. W. P.

Clinical Pathology of the Blood. By JAMES EWING, A. M., M. D., Professor of Pathology in Cornell University Medical College, New York City. Illustrated with 30 Engravings, and 14 Colored Plates Drawn by the Author. Lea Brothers & Co., Philadelphia and New York. 1901.

This excellent work is of value to student and general practitioner, and also goes deep into the subject, so that the hematologist will find it of practical use. The literature on this subject is voluminous, and much of what is good has come out in the last few years, and has not previously been amassed into a text-book. All this information is comprised in the pages of this work. It contains, in addition to the collation of literature, some good original thoughts of the author. We recommend this book highly. It belongs to that class of scientific works that are sure to become popular with all readers.

Progressive Medicine, Vol. II., June, 1901. A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M. D., Professor of Therapeutics and Materia Medica in Jefferson Medical College of Philadelphia. Octavo, Handsomely Bound in Cloth, 460 pages, with 81 Engravings and one Full-page Plate. Lea Brothers & Co., Philadelphia and New York. Issued Quarterly. Price, $10 per year.

This second volume of the popular quarterly review of medicine and surgery known as "Progressive Medicine," contains the following monographs:

Surgery of the Abdomen, Including Hernia, by William B. Coley; Gynecology, by John G. Clark; Diseases of the Blood and Ductless Glands, the Hemorrhagic Diseases, Metabolic Diseases, by Alfred Stengel; Ophthalmology, by Edward Jackson.

Coley deals in detail with Phelps' operation for inguinal hernia, and devotes considerable space to Coucil's end-to-end anastomosis of the small intestine.

In regard to Gaylord's latest researches, a study of the very elaborate abstract from Leopold's (Dresden) work on parasites of cancer, given in Clark's essay, is of great interest. Special attention may be called to the chapters dealing with pernicious anemia and diabetes mellitus in Stengel's monograph. Jackson's summary on ophthalmology is distinguished by the great number of papers reviewed in it.

Thus both the general practitioner and the specialist will find in this new volume a complete and consecutive synopsis of the latest advances in medical and surgical sciences in a concise and clear form.

The Acute Contagious Diseases of Childhood. By MARCUS P. HATFIELD, A. M., M. D., Professor Emeritus of Diseases of Children, Northwestern University Medical School; Professor of Diseases of Children, Chicago Clinical School; Attending Physician, Wesley Hospital. Pages, 142. Price, $1.00, net. G. P. Engelhard & Co., 358–362 Dearborn street, Chicago. 1901.

This little work gives in a terse form a consideration of the acute contagious diseases of childhood, and embraces all that is recent in this branch

of pediatrics. It is a scientific discourse and will well repay perusal. The several diseases are taken up systematically. Scarlatina is given special prominence and is well treated. In short, it can be recommended to those who wish to get facts on this subject in a hurry and to be informed of the most recent literature in brief outline.

A Syllabus of New Remedies and Therapeutic Measures, With Chemistry, Physical Appearance and Therapeutic Application. By J. W. WAINRIGHT, M. D., Member of the American Medical Association, New York State Medical Association, United States Pharmacopeial Convention, 1900; American Chemical Society, etc. Pages, 229. Price, $1.00, net. G. P. Engelhard & Co., 358–362 Dearborn street, Chicago. 1901.

The author states in his preface that his aim in this book is to give the practitioner information on the new remedies that appear from time to time, which do not go into the text-books, for some reason or another. He gives a succinct review of the most important remedies, and we feel sure that the book will fill a "long-felt want" in medical literature. It is to be recommended to the profession.

Principles of Surgery. By N. SENN, M. D., Ph. D., LL. D., Professor of Surgery in Rush Medical College in Affiliation with the University of Chicago; Professorial Lecturer on Military Surgery in the University of Chicago; Attending Surgeon to the Presbyterian Hospital; Surgeon-in-Chief to St. Joseph's Hospital; Surgeon-General of Illinois; late Lieutenant-Colonel of United States Volunteers and Chief of the Operating-staff with the Army in the field during the Spanish-American War. Third edition. Thoroughly revised with 230 wood-engravings, half-tones and colored illustrations. Royal Octavo. Pages, xiv—700. Extra Cloth, $4.50, net; Sheep or Half-Russia, $5.50, net. Delivered. Philadelphia: F. A. Davis Company, Publishers, 1914–16 Cherry street.

This excellent work from the pen of a master in surgery comes now to us in its third edition. The work represents an epitome on the principles of surgery, and is intended for the student and practitioner. Its pages contain nothing that is antique, but it includes all that is modern in the etiology and treatment of surgical disease. The necessity for such a book is manifest; there are too many text-books on surgery which do not go into the principles of the subject, but are merely working mechanical manuals. To meet this deficit this book was written, and its reading will certainly acquaint one with the true principles of surgery. No one should practice surgery who does not understand the reasons for each condition that he finds and the means by which he can overcome these conditions, founded on logical grounds. To those who desire a book which will thoroughly instruct them on the science as well as the art of surgery we cheerfully recommend Dr. Senn's valuable work.

Manual of the Diseases of Children. By JOHN MADISON TAYLOR, A. M., M. D., Professor of Diseases of Children, Philadelphia Policlinic, and WILLIAM H. WELLS, M. D., Adjunct Professor of Diseases of Infancy and Obstetrics in the Philadelphia Policlinic. Second edition, thoroughly revised and enlarged. Illustrated. Price, $4.50. Philadelphia: P. Blakiston's Son & Co. 1901.

This manual of pediatrics, now in its second edition, certainly should be widely read by the student and practitioner. It is made up of over 900 well-written pages and contains illustrations elucidating the type very well. The vast subject of pediatrics has been treated as tersely as possible, yet nothing seems to have been neglected. We were particularly impressed with the able treatment of infant feeding, than which there is no more important subject in pediatrics. The diseases of children as described in this book are easily understood by the student; and the advanced worker, too, will be benefited by having such a condensed manual at his elbow. The chapters on insanity in children are well written and display rare intelligence on the part of the authors in putting them into the book—something which is usually omitted from these works on pediatrics. The subject of the treatment of rachitis is well taken up, and we heartily agree with the writers in their views on this subject. In short, the whole manual deserves unstinted praise.

A Manual of Practical Hygiene for Students, Physicians and Medical Officers. By CHARLES HARRINGTON, M. D., Assistant Professor of Hygiene in the Medical School of Harvard University. Illustrated with 12 plates and 105 engravings. Lea Brothers & Co., Philadelphia and New York.

This book is by far the best working manual of practical hygiene that has yet appeared in the English language. The subject is handled exceedingly well, and shows well that its author is a practical hygienist, and at the same time is perfectly familiar with allied branches which are so necessary for a full comprehension of the broad subject treated. It is thoroughly up-to-date. There is no verbosity. Enough is given to give the reader a clear idea of the matter in hand. There is a mass of information in the book that will prove invaluable reading for all medical men. The matter of water pollution and sewage disposal—all important topics at the present day in this land—are well discussed, and proper opinions on the same are given by the author. The reviewer has never seen a medical book which gave more satisfaction to indorse favorably than the work in hand.

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THE term Parvule, from *Parvum*, (small) is applied to a class of remedies (Warner & Co.'s) in the form of minute pills, containing minimum doses for frequent repetition in cases of children and adults. It is claimed by some practitioners that small doses, given at short intervals, exert a more salutary effect. Sydney Ringer, M. D., in his recent works on Therapeutics, sustains this theory in great variety of cases. 20 cents per 100.

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MED. PROP.—ALTERATIVE, PURGATIVE.

DOSE.—1 to 2 every hour. Two Parvules of Calomel, taken every hour until five or six doses are administered (which will comprise but half a grain), produce an activity of the liver which will be followed by bilious dejections and beneficial effects, that twenty grains of Blue Mass or ten grains of Calomel rarely cause, and sickness of the stomach does not usually follow.

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℞ Calomel, 1-10 gr.
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MED. PROP.—ALTERATIVE, PURGATIVE.

DOSE.—1 to 2 every hour. Two Parvules of Calomel and Ipecac, taken every hour until five or six doses are administered (which will comprise but a grain of Calomel), produce an activity of the liver, which will be followed by bilious dejections and beneficial effects, that twenty grains of Blue Mass or ten grains of Calomel rarely cause, and sickness of the stomach does not usually follow.

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The most useful application of this Parvule is in periodic irregularities—Dysmenorrhœa and Amenorrhœa. They should be given in doses of one or two every evening at and about the expected time.

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wo Parvules of Podophyllin, administered three times a day, will re-establish and regulate the peristaltic action and relieve habitual constipation, add tone to the liver, and invigorate the digestive functions.

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MEDICAL SOCIETIES.

The Mississippi Valley Medical Association.—The next medical society meeting of any importance will be the Mississippi Valley Medical Association, convening at Put-in-Bay, Ohio, September 12th, under the presidency of Dr. A. H. Cordier, of Kansas City.

Put-in-Bay is an ideal place for a medical meeting, the Hotel Victory being a splendid hotel and having an excellent convention hall.

The preliminary program includes the following papers:

1. Address in Medicine, by Frank Billings, Chicago.
2. Address in Surgery, by Reginald Sayre, New York City.
3. Address of President, A. H. Cordier, Kansas City, Missouri.
4. Pathological Cause of the Eruption in the Exanthemata, by J. M. Postle, Hinckley, Illinois.
5. Acute Intestinal Auto-Infection, by John M. Batten, Downingstown, Pennsylvania.
6. Surgery of the Palate, with Stereopticon Exhibit, by Truman W. Brophy, Chicago, Illinois.
7. Some New Remedial Agents in the Treatment of Gynecologic Affections, by Chauncey D. Palmer, Avondale, Cincinnati, Ohio.
8. Hematology, by L. H. Warner, New York City.
9. Surgical Treatment of Pulmonary Abscess, by D. N. Eisendrath, Chicago, Illinois.
10. The Severing of the Vas Deferens and Its Relation to Neuro-Psychopathic Constitution, by H. C. Sharp, Jeffersonville, Indiana.
11. Adrenalin, the Active Principle of the Suprarenal Glands; Its Mode of Preparation, by Jokichi Takamine, New York City.
12. Varicose Veins and their Treatment, by J. Lively Johnson, Louisville, Kentucky.
13. Subdural Hematoma from Pachymeningitis Hemorrhagica Interna, by Charles J. Aldrich, Cleveland, Ohio.
14. Some Obscure Injuries which Follow the First Toxic Action of Alcohol, by T. D. Crothers, Hartford, Connecticut.
15. Sterilization of Rubber Gloves, Catheters, etc., by Formaldehyd Gas; Correct and Erroneous Culture Tests, by A. Goldspohn, Chicago, Ills.
16. Auto-Intoxication and Its Treatment, by Charles H. Shepard, Brooklyn, New York.
17. Aboriginal American (Indian) Contribution to Therapeutics, by B. T. Whitmore, New York City.
18. The Bed-Treatment of the Insane, by Frank Parsons Norbury, Jacksonville, Illinois.
19. The Clinical Diagnosis of Carcinoma of the Esophagus and the Technique of Gastrostomy, by Charles G. Cumston, Boston.
20. Clinical Notes on Gleet, by A. Ravogli, Cincinnati, Ohio.
21. Dentists' Neck, a Hitherto Undescribed Neurosis, by Albert E. Sterne, Indianapolis, Indiana.
22. The Value of Mechanical Appliances in the Aid of Intestinal Suture, by Edward H. Lee, Chicago, Illinois.
23. A Discussion of the Morbid Conditions of the Upper Respiratory Tract Resulting from the Infectious Diseases, by Colus M. Cobb, Boston, Massachusetts.
24. Congenital Valvular Obstipation, by Thomas Charles Martin, Cleveland, Ohio.

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Catarrhal Conjunctivitis or Ophthalmia, Purulent Conjunctivitis, Ophthalmia in Children Inflamed and Granular Eye Lids, Etc.

Send for free 300-page book "Rational Treatment of Diseases caused by Germs," containing reprints of 140 scientific articles by leading contributors to medical literature.

Physicians remitting 50 cents will receive one complimentary sample of each, "Hydrozone" and "Eye Balsam."

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Hydrozone is put up only in extra small, small, medium and large size bottles bearing a red label, white letters, gold and blue border, with my signature.

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27. Gastric Lavage, Its Uses and Abuses, by Thomas Hunt Stucky, Louisville, Kentucky.

28. Some Causes of Ignored Syphilis and their Remedies; Clinical Examples Demonstrated from Lantern Slide Reproductions, by M. L. Heidingsfeld, Cincinnati, Ohio.

29. A Few Cases of Hysteria, by Hugh T. Patrick, Chicago, Illinois.

30. A New Method of Controlling Hemorrhage in Operations Upon the Head and Neck, by George W. Crile, Cleveland, Ohio.

31. Tripartition in the Study of the Female Pelvis, by A. Ernest Gallant, New York City.

32. Scientific Aids to Diagnosis, by Henry D. Holton, Brattleboro, Vt.

33. How Should Appendicitis Cases be Treated? by Joseph Price, Philadelphia, Pennsylvania.

34. A Case of Unilateral Fulminating Optic Neuritis Cured by Trephining the Sphenoidal Sinus, by J. O. Stillson, Indianapolis, Indiana.

35. Surgical Cases from a Medical Standpoint, by I. N. Love, New York City.

36. The Surgical Features of Typhoid Fever and Dysentery, by Hal. C. Wyman, Detroit, Michigan.

37. Surgical Intervention in Pulmonary Abscess, with Illustrative Cases, by W. J. Macdonald, Albany, New York.

38. Report of One Hundred Cases Operated for Appendicitis, by William J. Gillette, Toledo, Ohio.

39. The Surgical Treatment of Diseases of the Stomach, by A. Vander Veer, Albany, New York.

40. Some Indications for Gastroenterostomy, by William J. Mayo, Rochester, Minnesota.

41. The Young Doctor, by Emil Amberg, Detroit, Michigan.

42. Fractures, by E. B. Smith, Detroit, Michigan.

43. Cancer of the Uterus, by Louis Frank, Louisville, Kentucky.

44. Floating Liver, with Report of Case, by J. H. Carsters, Detroit, Michigan.

45. The Acquirement of Nervous Health, by F. Savary Pearce, Philadelphia, Pennsylvania.

And papers are promised by the following: H. N. Moyer, Chicago; N. Stone Scott, Cleveland, Ohio; C. F. McGohan, Bethlehem, New Hampshire; Javis N. Jackson, Kansas City, Missouri; H. B. Kinzer, Bristol, Tennessee; A. M. Phelps, New York, New York.

The Clover Leaf Route (St. Louis office 104 North Fourth street) offers good service for members leaving St. Louis, Train No. 6, leaving Union Station at 7:56 P. M., arriving at Toledo at 8:35 A. M., and connecting with boat arriving at Put-in-Bay at noon.

Tickets will be sold via Cleveland over the Big Four R. R. at one cent per mile, making the cost much less than one fare for the round trip. Three boats daily leave Cleveland for Put-in-Bay, making only a nominal charge for the trip. Tickets will be on sale September 8th to 12th, good returning until October 8th.

The extreme caution that is necessary in the treatment of anaemia and other wasting diseases during the heat of summer is the best justification for the almost universal use of Scott's Emulsion in such cases at that period of the year.

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SUPPORTING the strength of the typhoid patient without overloading the stomach or fatiguing the intestine demands the most careful judgment on the part of the physician. The selection of a diet which will nourish the patient without giving distress, causing elevation of the temperature, or inducing diarrhœa presents a problem heretofore difficult of solution. The question has been satisfactorily settled in

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The ingestion of **PLASMON** even in the early stages of typhoid fever will not cause any rise in temperature; it nourishes the patient without overtaxing the digestive organs, stimulates the natural appetite, and if diarrhœa exists **PLASMON** has a tendency to check it without producing constipation.

PLASMON furnishes the system with the most essential constituent of the human organism, Albumin, and in a soluble, extremely digestible and highly assimilable form. It can be administered alone, or in combination with any articles of food. PLASMON is not a substitute for Albumin, but IS ALBUMIN, pure and simple. *Physicians are invited to send for samples, and prove for themselves that the claims made for PLASMON as a nutrient are based upon established facts.*

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Diarrhœa of Phthisis.

℞ Resin terebinth..... gr. iij
Argenti nitrat.,
Opii.....aa gr. ¼

M. Sig.—One pill when needed.—ROOSEVELT HOSPITAL.

Summer Catarrh, or Hay Asthma.

℞ Potass. iodid.....ʒ j
Liq. potass. arsenit.....ʒ j
Aquæ.....ʒ iv

M. Sig.—Teaspoonful every four or six hours.

This given internally; combined with following formula for local use, applied by means of post-nasal syringe:

℞ Tinct. iodinii.....ʒ j
Acid. carbol.....gtts x
Aquæ distillat.....ʒ iv

M. Sig.—Apply with post-nasal syringe.
—BARTHOLOW.

Malarial Enlargement of Spleen.

℞ Quininæ sulphat.....ʒ j
Ferri sulphat. exsiccat.....ʒ iss

M. ft. pil. No. xxx. Sig.—Four or five pills during day.—BARTHOLOW.

Diarrhœa of Typhoid Fever.

℞ Ac. sulphuric aromat.....ʒ j
Ext. hæmatox fl.....ʒ ss
Spts. chlorof.....ʒ ss
Syr. zingiberis.....ad ʒ iij

M. Sig.—Two teaspoonfuls every two to four hours.—HARE.

For Hæmoptysis.

℞ Acid. gallici.....ʒ ij
Acid. sulph. aromat.....ʒ j
Glyceriuæ.....ʒ j
Aq. distillat.....q. s. ad ʒ vj

M. Sig.—Teaspoonful at doses; repeat frequently.—PEPPER.

Wounds of Veins.—Wounds of veins are of importance both on account of the immediate and the remote effects they produce. The immediate troubles which have to be dealt with are (*a*) dangerous hemorrhage, and (*b*) entry of air into the vein. The remote troubles are chiefly thrombosis, embolism, pyæmia and œdema of the part corresponding to the distribution of the vein. The immediate troubles are more common in connection with operation wounds, the remote troubles in accidental wounds.—*Cheyne and Burghard, Med. Record.*

Cocaine in the Treatment of Intestinal Wounds.—One of the inconveniences attending the use of the anthelmintics ordinarily employed, particularly of extract of male-fern, consists of the vomiting following the taking of the medicament. In a case of this kind, where the extract of male-fern was not well borne by the stomach, Flesch had recourse to the administration, in addition to the male-fern, of a solution of cocaine, of which the patient took a few drops from time to time in a little water before and during the ingestion of the capsules of extract of male-fern. The solution of cocaine Flesch employed is formulated as follows:

℞ Cocaine.....grs. 2¼
Ext. belladonna.....grs. 3
Aq. valerian.....ʒ 2½

The patient took in all five centigrams of cocaine. A purgative, calomel, given some hours later, brought about the expulsion of the tenia. The patient was kept in bed during the twenty-four hours that the treatment lasted.—*Exchange.*

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"The Suprarenal Substance is in my experience a specific for the symptoms of hay fever, and a remedy to rapidly and surely restore the condition of the nasal erectile tissue."

"The Suprarenal Substance is an ideal heart stimulant. No other drug can compare with it for rapidity of action, strength, efficiency and safety combined."

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Protan.—(A new intestinal astringent introduced by H. K. Mulford Company, of Philadelphia, Pennsylvania.) Protan is a definite chemical compound formed by the synthesis of tannic acid with nuclo-proteid, containing fifty per cent. of tannic acid. It forms a light brown powder, is tasteless, odorless and entirely free from astringent action upon the mouth and stomach. It is insoluble in water, acid solutions, or the gastric juice; does not coagulate albumen nor precipitate pepsin or peptones; is unaffected by the gastric juice and passes through the stomach chemically unchanged; it is, therefore, entirely free from deleterious action upon the stomach and processes of digestion.

Protan first evolves its active astringent ingredient, tannic acid, when it reaches the small intestine and comes in contact with the alkaline pancreatic juice. Free tannic acid is but very slowly evolved from protan as it passes downward through the intestines, so that its astringent action is manifested throughout the entire intestinal tract. This fact is verified by the appearance of minute quantities of both protan and tannin in the feces.

Protan owes its influence to the presence of tannic acid so combined that this body reaches the intestines chemically unchanged. The astringent action of tannin, as all authorities agree, is due to the fact that it precipitates (coagulates) the albuminoid bodies of mucous membranes, which coagulation leads to an actual shrinkage of the structures with constriction of the capillaries and diminution of secretion. When tannic acid is administered by the mouth, those changes take place in the stomach, so that not only is the gastric mucous membrane and the process of digestion seriously impaired, but the tannic acid is decomposed by the gastric juice into gallic and pyrogallic acids, which are non-astringent; hence, very little, if any, of the tannic acid reaches the intestines in a chemically unchanged (astringent) form. Protan, on the contrary, passes through the stomach in its original form and presents to the intestines a definite amount of tannic acid chemically unchanged and actively astringent. The well-known properties of tannic acid towards albuminoid bodies are here manifested: The growth of bacteria is hindered, their toxins rendered inert, the intestinal mucous membrane is contracted, covered with a superficial coagulum, capillaries constricted and the exudation of leucocytes prevented. Thus is explained the remarkable clinical value of protan in all catarrhal and ulcerative conditions of the intestines, associated with diarrhea.

Protan is furnished in powder form in one-ounce cartons, for dispensing in cachets, capsules or powders. Protan is also furnished in friable tablet form and in combination.